

TYPE SPECIMENS OF RECENT MAMMALS IN THE MUSEUM OF COMPARATIVE ZOOLOGY

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ABSTRACT. The Mammal Department at the Museum of Comparative Zoology houses name-bearing types of 342 species-group taxa of Recent mammals. The type collection consists of 327 holotypes, 2 lectotypes, 4 complete syntype series, and 9 partial syntype series. This catalogue notes information on the type locality, collector, date of collection, present condition, original publication, and synonyms for all name-bearing types in the Mammal Department. Comments on the taxonomic and historical importance of many type specimens are included. Lectotypes for a number of taxa are designated for purposes of taxonomic consistency.

INTRODUCTION

“Some of them are more or less historic specimens,” wrote the great mammalogist Glover M. Allen in 1931, “whose location has undoubtedly in many cases been lost sight of, so that it may be of value to make the present record” (1931: 230). Allen, then Curator of Mammals at the Museum of Comparative Zoology at Harvard University, was referring to the type specimens of mammals in the museum, the subject of a listing he published that year. Allen’s words resound with even greater truth today than when they were written 70 years ago. Since that time, the museum’s holdings of mammal type specimens have grown considerably. Furthermore, type specimens of mammals housed in the MCZ have sometimes been credited to the collections of other institutions or considered to no longer exist, making the need for a new catalogue obvious.

Type specimens are biological reference points that lend objectivity to taxonomy and are thus of critical importance in systematic investigations; accordingly, “every institution in which name-bearing types are deposited should publish lists of name-bearing types in its possession or custody”

(International Commission on Zoological Nomenclature, 1999: 79). Our duty in this regard is thus long overdue, and this catalogue should serve to fulfill that obligation. Without doubt, it will alleviate confusion in the scientific community as to the whereabouts of certain specimens, thought to be lost, especially those type specimens that were acquired from Guillaume Grandidier. In addition, it should bring to light information, formerly unavailable, on this museum’s very notable holdings of name-bearing types.

All taxonomic judgments in this work, including new name combinations and lectotype designations, reflect the decision of the first author (KMH) alone and should be cited accordingly.

AUTHORS OF TYPE DESCRIPTIONS

Four mammalogists authored the overwhelming majority of names based on type specimens in the MCZ: Glover Allen, Outram Bangs, Guillaume Grandidier, and Barbara Lawrence. Following are brief biographies of these four outstanding mammalogists.

Glover M. Allen (1879–1942)

Curator of Mammals at the MCZ from 1924 until his death in 1942, Glover Allen began his work in the Mammal Department in 1907. He was known as a careful, dependable researcher and an outstanding, patient teacher. His goal in all endeavors was to increase the sum total of knowledge about the mammals of the world. Although much of his career was spent in the museum studying, as he put it, “the dried remains of animals” (Barbour et al., 1943: 300), he also traveled widely throughout the world collecting specimens as well as observing and learning about living animals. He once commented that the actual knowledge of living creatures could all too often be summed up by saying “when we found it, it ran like hell, whereupon we shot it!” (Barbour et al., 1943: 300). He wrote prolifically; his bibliography of publications is 81 pages long, the

first of which he published when he was only 11 years old (Lawrence 1947a: 1). Holotypes for 96 taxa, which Allen described alone or with colleagues, are deposited in the MCZ.

Outram Bangs (1863–1932)

Outram Bangs, Curator of Mammals from 1899 to 1924, “was one of those fortunate mortals, born with a love of nature and the outdoors which rule their entire lives” (Peters 1933: 265). Bangs authored 135 MCZ mammal names (only one co-authored!). He and brother Edward began collecting as boys using slingshots and horsehair nooses. He was an early ecologist, saving *Microtus breweri* by killing the feral cat population on Massachusetts’ Muskeget Island and restocking the mouse from a tiny islet across the channel. Although his greatest passion was the natural history of birds, he was also fascinated with mammals and served as curator of both departments in the MCZ. He decided to systematically collect the mammals of eastern North America in about 1890. He began by trapping in New England and later made trips to the southeastern United States and Canada. Other collectors assisted Bangs, expanding the collection area to western North America and south to Central America. His precision and organization were legendary, and today his mammal collection of more than 10,000 specimens, donated to the Museum in 1899, remains one of the best curated and most informative in the department. A complete list of Bangs’ scientific publications was compiled by Porter (1943).

Guillaume Grandidier (1873–1957)

French explorer and scientist Guillaume Grandidier, son of naturalist Alfred Grandidier, authored and coauthored descriptions of 13 taxa whose types were donated to the MCZ in 1947, along with his extensive personal collection of Malagasy mammals. The collection was purchased by Robert Barbour and donated to the MCZ in honor of his brother, MCZ director

Thomas Barbour. Between 1898 and 1902, Grandidier explored the center and southern portions of Madagascar, collecting specimens and describing the geography of the area. Through his writings he brought the unique fauna of this remote region to the attention of the scientific world. He was known for his devotion to the careful acquisition of knowledge, whether it was geographical, historical, or scientific. His work was honored by both the scientific community and the French government (Chapus, 1953).

Barbara Lawrence (1909–97)

After graduating from Vassar College in 1931, Barbara Lawrence became a volunteer at the MCZ. She was encouraged by Dr. Glover Allen to do her own research, and in the late 1930s she made field trips to the Philippines and Sumatra to collect mammals. In 1952 she was appointed Curator of Mammals, a position she held until her retirement in 1976. Her areas of scientific interest were many, ranging from echolocation in whales to zooarchaeology, as well as the more traditional mammalogical pursuit of taxonomy. “She once wrote ‘. . . to know and love a bit of the world so well that you can give it to someone else . . . is a rare talent’” (Rutzmoser, 1999: 1049), certainly a talent Barbara Lawrence had in abundance. She authored or coauthored 20 MCZ names.

The specimens described by these authors and others are the result of worldwide collecting by numerous expeditions and individuals, listed in the accounts that follow. A handful of type specimens in the MCZ were formerly in the collection of the National Museum of Natural History in Washington, D.C. According to Glover Allen, these were obtained via exchanges “at a time when ‘duplicates’ were more freely disposed of, [and would] prove to be cotypes or even actual types” (1931: 229). The collections of the Boston Society of Natural History, once contained in the Boston Museum of Science, were trans-

ferred to the Museum of Comparative Zoology over the course of the 20th century. Several types are among these specimens, which consist primarily of mammals from the New England region.

DEFINITIONS AND ORGANIZATION

Type Categories

Type specimens are categorized as one of the following:

Holotype. The single specimen designated as name-bearer in the original published description of the species-group taxon (Article 73.1, International Commission on Zoological Nomenclature, 1999: 79).

Syntype. One of multiple specimens on which a species-group name is equally based, when no holotype is specified in the original description and no subsequent designation of a lectotype has been published (Article 73.2, International Commission on Zoological Nomenclature, 1999: 81).

Lectotype. One of multiple specimens upon which a species-group name is originally based, designated in a publication subsequent to the original description to become the unique name-bearer (Article 74, International Commission on Zoological Nomenclature, 1999: 82).

Neotype. A specimen chosen as the name-bearer of a species-group taxon, "if no holotype, lectotype, syntype, or prior neotype is believed to exist" (Article 75, International Commission on Zoological Nomenclature, 1999: 84). There are no neotypes in the MCZ mammal collection.

Paratype. A specimen other than the holotype (if designated originally) that is mentioned in the original description of a species-group taxon. Paratypes of species-group taxa whose holotypes are housed in other institutions are not mentioned in this catalogue, although many such specimens exist in this museum.

Paralectotype. If no holotype is designated, a specimen other than the lectotype (if designated subsequently) that is mentioned in the original description of a spe-

cies-group taxon. Paralectotypes of species-group taxa whose lectotypes are housed in other institutions are discussed below, before the accounts for name-bearing types.

Locality

This category includes country, second-level geopolitical division (state, department, territory, province, or district), collection site, and altitude where available. The geographic name given for a type locality is that found in the original publication. When the description of the collection locality does not include current geopolitical divisions, that information is provided in parentheses. If an original name is no longer used, an equals sign (=) is included within the parentheses to designate an equivalent modern name. Where altitude was originally given in feet, it has been converted to meters and included in parentheses.

Sources used for the current names are from the most current available Gazetteers of the United States Board on Geographic Names, the 10th comprehensive edition of the Times Atlas of the World, the Columbia Gazetteer of the World, and the Ornithological Gazetteers of South America.

Account Organization

The type locality, collector, date of collection, and present condition of each specimen are noted. The publication of the original description is cited for each specimen. Many names have changed in rank or synonymy since their origin; in these cases, the name by which a taxon is known today is noted, with a citation of the publication in which that name combination was first employed for that taxon. Comments are offered for most entries to provide additional information or to dispel potential sources of confusion.

The format of this catalogue is largely borrowed from the most recent type catalogue of mammals in the American Museum of Natural History (Lawrence, 1993). For systematic consistency, the tax-

onomic judgments at the species-level by the authors of the chapters in *Mammal Species of the World* (Wilson and Reeder, 1993) are largely adhered to. However, in many cases alternate views are explored, and subsequent work by other authors is noted. The sequence of mammalian orders presented here is as follows: Didelphimorphia, Dasyuromorphia, Peramelia, Cingulata, Afrosoricida, Rodentia, Lagomorpha, Scandentia, Primates, Lipotyphla, Chiroptera, Artiodactyla, Carnivora, and Cimolesta. This sequence represents the ongoing understanding of higher mammalian relationships being produced by research in molecular phylogenetics (Waddell et al., 1999) as well as paleontological studies (McKenna and Bell, 1997). A number of these names are rather nontraditional; use of the names Cingulata (for armadillos) and Cimolesta (for pangolins) at ordinal rank follows McKenna and Bell (1997). Afrosoricida is used for an order including tenrecs and golden-moles (following Stanhope et al., 1998: 9971–9972). We use the ordinal name Lipotyphla in a restricted sense to refer to the Recent families Nesophontidae, Solenodontidae, Soricidae, and Talpidae (others have used the term “Eulipotyphla,” e.g., Waddell et al., 1999). Cetaceans are included here within the order Artiodactyla (an assemblage often referred to as “Cetartiodactyla” in recent literature; see Graur et al., 1997).

To avoid unnecessary complexity, orders, families, and genera are the only ranks above the level of species that are listed, except for the large family Muridae, for which subfamilial distinctions are provided, in alphabetical order. Within each order, the sequence of families generally follows Simpson (1945), but Wilson and Reeder’s (1993) order of rodent families and Simmons’ (1998: 12) arrangement of the bats are observed. Within each genus, taxa are presented in alphabetical order by original name.

The format of this catalogue is as follows, with all the following information provided when possible:

Original binomen. Name of describer, date of description.

Citation of original publication.

=*Presently used name, if different from original.* Citation of publication in which this name combination was initially used for this taxon.

Type Category. Number of specimen.² Preparation of specimen (skin, skull, alcohol, etc.), age and sex.

Locality. Type locality. Date of collection.

Collector. Name of collector. Original number of specimen.

Condition. Current condition of the type material.

Type Series. Any paratypes, paralectotypes, or additional syntypes in existence are mentioned, with their preparation, sex, and age.

Comments. Additional comments regarding the systematic status or the history of the specimen.

TAXA INCLUDED IN THIS CATALOGUE

Unlike Allen’s original type catalogue, fossil mammals are not considered here, but type specimens of Recent mammals known only from subfossil remains are discussed.

Several type specimens of Recent mammals that were included in Allen’s catalogue are not considered here as name-bearing types. A number of syntype series in the MCZ have since Allen’s time been rendered paralectotypes by the designation of a lectotype preserved in another institution; these are discussed in the section below on paralectotypes. Additionally, MCZ 14929, listed as a “cotype” of *Nycteris revoili* Robin, 1881 by G. M. Allen (1931: 235), is a paratype rather than a syntype and is not considered here.

² Mammal specimens in the MCZ bear any of three kinds of numbers. A number preceded by “MCZ” can be found in the general collection in the Mammal Department. A number preceded by a “B” is part of the collection of E. A. and O. Bangs, also housed in the Mammal Department. A number preceded by “VP” designates that the specimen is stored in the Vertebrate Paleontology Department.

One other enigmatic specimen in the collection deserves some mention. When it was received by the Mammal Department, Guillaume Grandidier's personal collection contained specimens marked as types for 16 taxa, described by either Grandidier or M. L. Lavauden. Fifteen of these holotypes are discussed within this catalogue in separate accounts. The remaining specimen, a fruit bat, MCZ 45073, is marked exactly like the other type specimens, and both its skin and its skull tags bear the name "*Eidolon sakalava* nov. spec., G. Grandidier" in the scripted handwriting typical of Grandidier's specimens. The locality given for the specimen is Ankavandra, in west-central Madagascar. Though this specimen has been curated as a type specimen, I (KMH) can find no published description of this taxon or any reference to this name in the literature. This name is therefore invalid, barring a discovery in the future that it was indeed published and has since been overlooked. Whatever the published status of the name, it appears to me that this specimen should be considered as a young specimen of *Eidolon dupreanum* rather than a distinct species, and discussion of this mysterious binomial here should in no way be construed as a formal description of a new taxon.

ABBREVIATIONS

Abbreviations are used in the text to designate the following institutions.

AMNH	American Museum of Natural History, New York
BMNH	Natural History Museum, London
BSNH	Boston Society of Natural History, Boston
FMNH	Field Museum of Natural History, Chicago
MNHN	Muséum National d'Histoire Naturelle, Paris
MVZ	Museum of Vertebrate Zoology, Berkeley, California
RMNH	Rijksmuseum van Natuurlijke Historie, Leiden

USNM	National Museum of Natural History, Washington, D.C.
YPM	Yale Peabody Museum of Natural History, New Haven, Connecticut

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PARALECTOTYPE SERIES

- Hesperomys eremicus* Baird, 1858 = *Peromyscus eremicus eremicus* (Baird, 1858). Lectotype, USNM 2575, designated by Osgood (1909: 241). MCZ 4310 and 5273 are paralectotypes.
- Neotoma fuscipes* Baird, 1858 = *Neotoma fuscipes fuscipes* Baird, 1858. Lectotype, USNM 22026, designated by Lyon and Osgood (1909: 99). MCZ 4336 and 5264 are paralectotypes.
- Mus bairdii* Hoy and Kennicott, 1857 = *Peromyscus maniculatus bairdii* (Hoy and Kennicott, 1857). Lectotype, number 750 in the Collection of the Academy of Natural Sciences of Philadelphia, designated by Osgood (1909: 80). MCZ 8073 is a paralectotype.
- Pteropus lanigera* [sic] H. Allen, 1890 = *Pteropus insularis* Hombron and Jacquinot, 1842. The corrected spelling of the original name is *Pteropus laniger* (see Andersen 1912: 297). H. Allen based the description of *Pteropus laniger* on two syntypes, USNM 19066 (skin)/37815 (skull) and MCZ 7023, a skin. Andersen (1912: 297–298) was unaware of

the whereabouts of this latter specimen and based his evaluation of the systematic status of *P. laniger* solely on the USNM specimen in his taxonomic review of the Megachiroptera. Because it is represented by both a skin and a skull in good condition and because it has been used in past taxonomic treatments, USNM 19066/37815 is hereby designated as the lectotype of *Pteropus laniger* to ensure consistency between past and future taxonomic treatments of this name. MCZ 7023 is thus a paralectotype. The type locality of *laniger* is the Caroline Islands, as emended by Andersen (1912: 298), not Samoa, as originally described.

Sciurus castanotus Baird, 1855 and *Sciurus castanotus* Baird, 1858 = *Sciurus aberti aberti* Woodhouse, 1853. Baird (1858: 266) noted that the name *castanotus*, used in his original description of this taxon, was a misprint for *castanonotus*. Lectotype, USNM 121/1107, designated by Lyon and Osgood (1909: 183). Though not explicitly stated by Lyon and Osgood, this specimen should serve as a lectotype for both names (*Sciurus castanotus* Baird, 1855 and *Sciurus castanonotus* Baird, 1858), for taxonomic consistency. MCZ 4692 is a paralectotype.

Spermophilus obsoletus Kennicott, 1863 = *Spermophilus pilosoma obsoletus* Kennicott, 1863. Lectotype, USNM 3222/27998, designated by A. H. Howell (1938: 130). See G. M. Allen (1931: 252) for a list of paralectotypes (then considered syntypes) in the MCZ.

Spermophilus parryi var. *kodiacensis* J. A. Allen, 1874 = *Spermophilus parryi kodiacensis* J. A. Allen, 1874. Lectotype, USNM 9242/38543, designated by A. H. Howell (1938: 103). See G. M. Allen (1931: 252) for a list of paralectotypes (then considered syntypes) in the MCZ.

Spermophilus tridecemlineatus var. *pallidus* J. A. Allen, 1874 = *Spermophilus tridecemlineatus pallidus* J. A. Allen, 1874. Lectotype, USNM 16237, designated by A. H. Howell (1938: 112). See G. M. Allen (1931: 253) for a list of paralectotypes (then considered syntypes) in the MCZ.

Tamias quadrivittatus var. *pallidus* J. A. Allen, 1874 = *Tamias minimus pallidus* J. A. Allen, 1874. Lectotype, USNM 11656/38311, designated by Cary (1906: 88). G. M. Allen (1931: 255) provided a list of paralectotypes.

ACCOUNTS OF NAME-BEARING TYPE SPECIMENS

Order DIDELPHIMORPHIA Gill, 1872

Family CALUROMYIDAE Kirsch and Reig, 1977

Genus CALUROMYS J. A. Allen, 1900

Philander cicur Bangs, 1898k

Proc. Biol. Soc. Washington, 12: 161, 10 August.

= *Caluromys lanatus cicur* (Bangs, 1898). See Cabrera (1958: 2).

Holotype. B8114. Skin and skull. Adult female.

Locality. Colombia: (Magdalena), Santa Marta Mountains, Pueblo Viejo, 8,000 ft (2,440 m). 27 March 1898.

Collector. W. W. Brown, Jr. Original number 123.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; B8036, skin and skull, adult male; B8115, skin and skull, adult male; B8116, skin and skull, adult male.

Family MARMOSIDAE Hershkovitz, 1992

Genus MARMOSA Gray, 1821

Marmosa robinsoni Bangs, 1898i

Proc. Biol. Soc. Washington, 12: 95, 30 April.

= *Marmosa robinsoni robinsoni* Bangs, 1898. See Cabrera (1958: 24).

Holotype. B7749. Skin and skull. Adult male.

Locality. Venezuela: (Nueva Esparta), Margarita Island. 12 July 1895.

Collector. W. Robinson. Original number 506.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 2 paratypes, both in the USNM; USNM 63209, skin and skull, adult male; USNM 63210, skin and skull, adult female.

Comments. *M. robinsoni* was considered a valid species by Gardner (1993: 18) and Nowak (1999: 21).

Marmosa mitis Bangs, 1898k

Proc. Biol. Soc. Washington, 12: 162, 10 August.

= *Marmosa robinsoni robinsoni* Bangs, 1898. See Cabrera (1958: 24).

Holotype. B8123. Skin and skull. Adult male.

Locality. Colombia: (Magdalena), Santa Marta Mountains, Pueblo Viejo, 8,000 ft (2,440 m). 25 March 1898.

Collector. W. W. Brown, Jr. Original number 91.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 26 paratypes; B8117–B8122, B8124–B8143; all represented by skin and skull, 15 females and 11 males. 5 paratypes are no longer in the MCZ (B8118 is at Wellesley College, B8124 and B8141 are at FMNH, and B8136 and B8138 are at USNM).

Marmosa fulviventer Bangs, 1901b
 Amer. Nat., 35: 632, 22 August.
 = *Marmosa robinsoni fulviventer* Bangs,
 1901. See Handley (1966: 775).

Holotype. BS435. Skin and skull. Adult male.
Locality. Panama: (Panama), Gulf of Panama, San Miguel Island. 28 April 1900.
Collector. W. W. Brown, Jr. Original number 123.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. 3 paratypes; BS436, skin and skull, female (exchanged to FMNH in 1931); BS437, skin and skull, female; BS438, skin and skull, male.
Comments. *M. r. fulviventer* was retained as a valid subspecies by Hall (1981: 14) and O'Connell (1983: 1).

Family DIDELPHIDAE Gray, 1821

Genus *DIDELPHIS* Linnaeus, 1758

Didelphis marsupialis particeps Goldman, 1917
 Proc. Biol. Soc. Washington, 30: 107, 23 May.

Holotype. BS439. Skin and skull. Adult male.
Locality. Panama: (Panama), Gulf of Panama, San Miguel Island. 8 May 1900.
Collector. W. W. Brown, Jr. Original number 165.
Condition. Skin and skull complete.
Type Series. 1 paratype; BS440, skin and skull, adult female.
Comments. Retained as a valid subspecies by Hall (1981: 4).

Didelphis virginiana pigra Bangs, 1898b
 Proc. Boston Soc. Nat. Hist., 28: 172, 15 March.

Holotype. B3500. Skin and skull. Adult female.
Locality. (United States): Florida, Brevard County, Oak Lodge, East Peninsula opposite Micco. 31 January 1895.
Collector. O. Bangs.
Condition. Skin and skull complete.
Type Series. 11 paratypes; all represented by skin and skull, most still in the MCZ.
Comments. Retained as a valid subspecies by Hall (1981: 5) and McManus (1974: 1). The type description lists 31 January 1896 as the date of collection, but the date is written as "January 31, 1895" on the original specimen label and in Bangs' accession catalogue.

Order DASYUROMORPHIA Gill, 1872

Family DASYURIDAE Goldfuss, 1820

Genus *ANTECHINUS* Macleay, 1841

Antechinus mayeri misim Tate, 1947
 Bull. Amer. Mus. Nat. Hist., 88: 130, 20 February.
 = *Antechinus naso misim* Tate, 1947. See Laurie and Hill (1954: 7).

Holotype. MCZ 29924. Skin and skull. Adult male.
Locality. Papua New Guinea: Morobe Province, Mount Misim (=Missim), 5,850 ft (1,784 m). 14 April 1933.
Collector. H. Stevens.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. 1 paratype; MCZ 29923, skin and skull, adult female.
Comments. Tate, in the original description, erroneously listed 24 April 1933 as the date of collection. *A. n. misim* was retained as a valid subspecies by Flannery (1995a: 80), who also noted that the New Guinean species assigned to the genus *Antechinus* are not closely related to the Australian species of that genus and will be reassigned at the generic level pending a full taxonomic revision of the group.

Genus *MYOICTIS* Gray, 1858

Myoictis melas wavicus Tate, 1947
 Bull. Amer. Mus. Nat. Hist., 88: 140, 20 February.
 = *Myoictis melas wallacei* Gray, 1858. See Flannery (1990: 56).

Holotype. MCZ 25082. Skin and skull. Adult male.
Locality. Papua New Guinea (S. Morobe), Wau, 3,800 ft (1,159 m). 27 March 1932.
Collector. H. Stevens. Original number 1.
Condition. Skin and skull complete.
Type Series. Holotype only.
Comments. Stevens' original field label bears the following lament—"To my intense anguish I failed to retrieve the female, shot on recumbent, decayed log in undergrowth."

Order PERAMELIA Ameghino, 1889

Family PERORYCTIDAE Groves and Flannery, 1990

Genus *ECHYMIPERA* Lesson, 1842

Suillomeles hispida G. M. Allen and Barbour, 1909
 Proc. New England Zool. Club, 4: 44, 12 July.
 = *Echymipera kalubu kalubu* (Fischer, 1829). See Laurie and Hill (1954: 11).

Holotype. MCZ 7006. Skin and skull. Adult.

Locality. (Indonesia): Dutch New Guinea (=Irian Jaya), Doreh Bay, Manokvari, "not far from the foot of Mt. Arfak." 23 February 1907.

Collector. T. Barbour.

Condition. Skin complete. Skull partial (occipital region and two posterior upper molars on each side missing).

Type Series. Holotype only.

Comments. *S. hispida* is the type species of *Suilomeles* G. M. Allen and Barbour, 1909.

Echymipera rufescens australis Tate, 1948
Bull. Amer. Mus. Nat. Hist., 92: 334, 25 November.

Holotype. MCZ 29214. Skin and skull. Adult male.

Locality. Australia: Queensland, Cape York, near Coen, east slope of McIlwraith Ranges, Rocky River, "Rocky Scrub." 20 June 1932.

Collector. P. J. Darlington, Jr., Harvard Australian Expedition. Original number 209.

Condition. Skin complete, but tip of tail worn. Skull complete.

Type Series. Holotype only.

Comments. Tate (1952: 582) reported that the exact type locality is "in the dense rain forests of the upper Nesbit River on the east slopes of the McIlwraith Range." Retained as a valid subspecies by Flannery (1995a: 111). Darlington noted in his field notebook, regarding this specimen, "Animal about the fattest I have skinned—I shall dream of it!"

Order CINGULATA Illiger, 1911

Family DASYPODIDAE Gray, 1821

Genus *DASYPUS* Linnaeus, 1758

Dasypus novemcinctus hoplites G. M. Allen, 1911a

Bull. Mus. Comp. Zool., 54: 195, July.

Holotype. MCZ 8116. Skin, skull, and postcranial skeleton. Adult female.

Locality. Grenada: hills back of Gonyave. 7 September 1910.

Collector. G. M. Allen. Original number 26.

Condition. Skin, skull, and postcranial skeleton complete.

Type Series. 2 paratypes; MCZ 8117, skin and skull, adult male; MCZ 8118, skin and skull, adult male.

Comments. Retained as a valid subspecies by Hall (1981: 283) and McBee and Baker (1982: 1).

Order AFROSORICIDA Stanhope et al., 1998

Family CHRYSOCHLORIDAE Gray, 1825

Genus *CHRYSOCHLORIS* Lacépède, 1799

Chlorotalpa tropicalis G. M. Allen and Loveridge, 1927

Proc. Boston Soc. Nat. Hist., 38: 418, 23 December.

= *Chrysochloris stuhlmanni tropicalis* (G. M. Allen and Loveridge, 1927). See Meester (1974: 3).

Holotype. MCZ 22435. Skin and skull. Adult female.

Locality. Tanganyika Territory (=Tanzania): Uluguru Mountains, Bagilo. 5 October 1926.

Collector. A. Loveridge.

Condition. Skin complete. Skull slightly damaged (coronoid processes missing from both mandibular rami). Mandible disarticulated.

Type Series. Holotype only.

Comments. Included in *Chrysochloris stuhlmanni* by Meester (1974: 3) but recognized as distinct by Simonetta (1968: 42). Hutterer (1993: 75) noted that the systematic status of *tropicalis* merits further study.

Family TENRECIDAE Gray, 1821

Genus *GEOGALE* Milne-Edwards and A. Grandidier, 1872

Cryptogale australis G. Grandidier, 1928
Bull. Mus. Hist. Nat. Paris, 34: 64, 26 January.

= *Geogale aurita* Milne-Edwards and A. Grandidier, 1872. See Genest and Petter (1975: 3).

Holotype. MCZ 45057. Skull fragments.

Locality. Madagascar (Toliary), south of Fort Dauphin (=Tolanaro), Andrahomana grotto. 1927.

Collector. R. Decary.

Condition. MCZ 45047 includes 18 partial crania and 8 mandibular rami. Fragmentary.

Type Series. All the type material of *C. australis* bears a single accession number.

Comments. *C. australis* is the type species of the genus *Cryptogale* G. Grandidier, 1928.

Geogale aurita orientalis G. Grandidier and Petit, 1930

Faune des Colonies Françaises, 4: 446.

Holotype. MCZ 45660. Body in alcohol, cranium separate.

Locality. Madagascar: (Toamasina), east coast, Fenerive (=Fenoarivo Atsinanana). April 1928.

Collector. R. Decary. Original number 12.

Condition. Alcoholic, cranium complete.

Type Series. Holotype only.

Comments. Retained as a valid subspecies by Genest and Petter (1975: 3). The holotype of *G. a. orientalis* seems to be the only record of *Geogale aurita* from the east coast of Madagascar.

Genus *MICROGALE* Thomas, 1882

Microgale decaryi G. Grandidier, 1928

Bull. Mus. Hist. Nat. Paris, 34: 69, 26

January.

= *Microgale principula* Thomas, 1926. See MacPhee (1987a: 9).

Holotype. MCZ 45049. Cranium. Adult.

Locality. Madagascar: (Toliary), south of Fort Dauphin (=Tolanaro), Andrahomana caves. 1926.

Collector. R. Decary.

Condition. Cranium partial (back of cranium missing posterior to parietals).

Type Series. Paratype material consists of MCZ 45408, which includes 3 partial crania and 5 mandibular rami, and MAD-1649, a partial skull in the collections of the Institut de Paléontologie, MNHN.

Microgale drouhardi G. Grandidier, 1934

Bull. Mus. Hist. Nat. Paris, 6: 474, 29

November.

Holotype. MCZ 45034. Body in alcohol, skull extracted. Juvenile female.

Locality. Madagascar: (Antsiranana), east coast, Diego-Suarez (=Antsiranana). May 1934.

Collector. M. E. Drouhard. Original number A.

Condition. Alcoholic, skull complete.

Type Series. 6 paratypes; MCZ 46007–MCZ 46012, all in alcohol. MCZ 46017, represented by a skull and postcranial skeleton, was collected at the same time and place as the type series but is not mentioned in the original description.

Comments. MCZ 45034 represents an immature animal (MacPhee 1987a: 7), not an adult as claimed in the original description. MacPhee (1987a: 9) synonymized *drouhardi* with *Microgale cowani*, an approach followed by Hutterer (1993: 71), but Jenkins et al. (1997: 6) argued that *M. drouhardi* is a distinct species.

Microgale parvula G. Grandidier, 1934

Bull. Mus. Hist. Nat. Paris, 6: 476, 29

November.

Holotype. MCZ 45465. Body in alcohol, skull extracted. Juvenile male.

Locality. Madagascar: (Antsiranana), east coast, Diego-Suarez (=Antsiranana). May 1934.

Collector. M. Drouhard.

Condition. Alcoholic, skull complete.

Type Series. Holotype only.

Comments. MCZ 45465 represents an immature animal (MacPhee 1987a: 7), not an adult as claimed in the original description. The holotype of *Microgale pulla* Jenkins, 1988 actually represents an adult specimen of *M. parvula* (Jenkins et al., 1996: 204). Considered a valid species by Hutterer (1993: 71) and Nowak (1999: 190).

Microgale prolixicaudata G. Grandidier, 1937

Bull. Mus. Hist. Nat. Paris, 9: 348, 25

November.

= *Microgale longicaudata* Thomas, 1882.

See MacPhee (1987a: 9).

Holotype. MCZ 45035. Body in alcohol, skull extracted. Juvenile.

Locality. Madagascar: (Antsiranana), east coast, Diego-Suarez (=Antsiranana). May 1934.

Collector. M. Drouhard.

Condition. Alcoholic; skull partial (left tympanic bulla missing). Mandible disarticulated.

Type Series. 1 paratype; MCZ 46020, in alcohol.

Comments. This specimen represents an immature animal (MacPhee 1987a: 8), not an adult as claimed in the original description.

Paramicrogale occidentalis G. Grandidier and Petit, 1931

Bull. Soc. Zool. France, 56: 129, 15 June.

= *Microgale brevicaudata* G. Grandidier, 1899. See MacPhee (1987a: 9).

Holotype. MCZ 45047. Body in alcohol, skull extracted. Juvenile male.

Locality. Madagascar: (Antananarivo), northwest of Maintirano, Andriafeuelo. 1930.

Collector. M. A. de la Rue.

Condition. Alcoholic, skull complete.

Type Series. Holotype only, but see comments.

Comments. *P. occidentalis* is the type species of the genus *Paramicrogale* G. Grandidier and Petit, 1931. This specimen represents an immature animal (MacPhee 1987a: 7), not an adult as claimed in the original description. The original description mentions only a single specimen but describes extensively the skeleton of *P. occidentalis*. This is puzzling, as the skeleton has not been extracted from MCZ 45047 (MacPhee 1987a: 7).

Genus *SETIFER* Froriep, 1806

Dasogale fontoynonti G. Grandidier, 1930a

Bull. Acad. Malgache, n. ser., 11: 85 (for 1928).

= *Setifer setosus* (Schreber, 1777). See Poduschka and Poduschka (1982: 261).

Holotype. MCZ 45016. Skin, skull, and postcranial skeleton. Juvenile.

Locality. Madagascar: east coast. 1917.

Collector. Received by G. Grandidier from the Académie Malgache in 1917.

Condition. Skin represented by a small patch of fur. Skull partial (occipital region missing). Postcranial skeleton complete, partially articulated.

Type Series. 1 paratype; MCZ 45532, in alcohol.

Comments. Walker (1975: 110) commented that "the only specimen known of *D. fontoynonti* . . . is in the Paris Museum"; actually, the only material attributed to *Dasogale* is in the MCZ, a fact first noted in publication by Poduschka and Poduschka (1982: 253). *Dasogale* was often considered to be an extremely rare or recently extinct species until Poduschka and Poduschka (p. 261) and MacPhee (1987b: 135) demonstrated that the holotype is probably a juvenile *Setifer setosus*. *D. fontoynonti* is the type species of the genus *Dasogale* G. Grandidier, 1930.

Order RODENTIA Bowdich, 1821

Family APLODONTIDAE Brandt, 1855

Genus *APLODONTIA* Richardson, 1829

Aplodontia californica columbiana Taylor, 1916

Univ. California Publ. Zool., 12: 499, 6 May.

= *Aplodontia rufa rainieri* Merriam, 1899. See Dalquest (1948: 369).

Holotype. B1899. Skin and skull. Adult male.

Locality. (Canada): British Columbia, Hope, Roab's Ranch. 14 June 1894.

Collector. W. C. Colt. Original number 479.

Condition. Skin and skull complete.

Type Series. 8 paratypes; B1892–B1898, B1900; all represented by skin and skull, 3 females and 5 males.

Family SCIURIDAE Fischer de Waldheim, 1817

Genus *CALLOSCIURUS* Gray, 1867

Callosciurus baluensis medialis G. M. Allen and Coolidge, 1940

Bull. Mus. Comp. Zool., 87: 156, 31 December.

Holotype. MCZ 22265. Skin and skull. Adult female.

Locality. (Indonesia): Dutch Borneo, (Kalimantan), Mount Tibang (possibly = Bukit Tungun). 1925.

Collector. E. Mjöberg. Original number 6.

Condition. Skin complete. Skull partial (right parietal, right tympanic bulla, and lachrymal broken—bulla present). Mandible disarticulated.

Type Series. Holotype only.

Comments. Retained as a valid subspecies by Medway (1977: 90).

Callosciurus ferrugineus primus G. M. Allen and Coolidge, 1940

Bull. Mus. Comp. Zool., 87: 157, 31 December.

= *Callosciurus erythraeus* (Pallas, 1778). See Corbet and Hill (1992: 283).

Holotype. MCZ 35352. Skin and skull. Adult female.

Locality. Siam (=Thailand): Mae Wan River near Doi, Mount Souket (=Saket), 1,500 ft (458 m). 20 February 1937.

Collector. J. A. Griswold, Jr., Asiatic Primate Expedition. Original number 5.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; MCZ 35353, skin and skull, adult male.

Sciurus castaneoventris haemobaphes G. M. Allen, 1912c

Proc. Biol. Soc. Washington, 25: 177, 24 December.

= *Callosciurus erythraeus haemobaphes* (G. M. Allen, 1912). See Hayman and Holt (1940: 359).

Holotype. MCZ 13693. Skin and skull. Male.

Locality. China: southeastern Yunnan, Chih-ping (=Shipping). 26 February 1911.

Collector. Kobayashi Collection. Original number 46.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Only the holotype is mentioned in the original publication, but Allen had four other specimens of these squirrels at the time of description (MCZ 13692, 13694–13696; all represented by skin and skull, 3 males, 1 female).

Genus DREMOMYS Heude, 1898***Dremomys pernyi flavior* G. M. Allen, 1912c**

Proc. Biol. Soc. Washington, 25: 178, 24 December.

Holotype. MCZ 13691. Skin and skull. Male.

Locality. China: southeastern Yunnan, Mongtzi (=Mengzi). 1911.

Collector. Kobayashi Collection. Original number 6/S.

Condition. Skin complete. Skull partial (squamosals missing, supraoccipital damaged, right jugal missing, palatine missing, tympanic bulla damaged).

Type Series. Holotype only.

***Dremomys senex* G. M. Allen, 1912b**

Mem. Mus. Comp. Zool., 40: 229, August.

= *Dremomys pernyi senex* G. M. Allen, 1912. See Hayman and Holt (1940: 382).

Holotype. MCZ 7582. Skin and skull. Adult female.

Locality. China: Hupeli (=Hubei), Ichanghsien, Nantou. 5 February 1909.

Collector. W. R. Zappey. Original number 373.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; MCZ 7583, skin and skull, adult male.

Genus FUNISCIURUS Trouessart, 1880***Funisciurus pyrrhopus victoriae* G. M. Allen and Loveridge, 1942**

Bull. Mus. Comp. Zool., 8: 180, February.

= *Funisciurus pyrrhopus akka* De Winton, 1899. See Amtmann (1975: 8).

Holotype. MCZ 39199. Skin and skull. Adult male.

Locality. Uganda: Toro, Kibale Forest, 4,200 ft (1,281 m). 16 December 1938.

Collector. A. Loveridge.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Genus GLAUCOMYS Thomas, 1908***Sciuropterus alpinus bangsi* Rhoads, 1897**

Proc. Acad. Nat. Sci. Philadelphia, 1897, p. 321 (footnote), July.

= *Glaucomys sabrinus bangsi* (Rhoads, 1897). See A. H. Howell (1918: 38).

Holotype. B6959. Skin and skull. Adult male.

Locality. (United States): Idaho, Idaho County. March 8, 1897.

Collector. Harbison and Bargamin.

Condition. Skin and skull complete.

Type Series. 1 paratype; B6960, skin and skull, adult male.

Comments. *G. s. bangsi* was retained as a valid subspecies by Hall (1981: 450).

***Sciuropterus alpinus lascivus* Bangs, 1899j**

Proc. New England Zool. Club, 1: 69, 31 July.

= *Glaucomys sabrinus lascivus* (Bangs, 1899). See A. H. Howell (1918: 55).

Holotype. B9186. Skin and skull. Adult female.

Locality. (United States): California, El Dorado County, Tallac. 28 August 1898.

Collector. W. W. Price and P. O. Simons. Original number 1722.

Condition. Skin and skull complete.

Type Series. 2 paratypes, B9187, skin and skull, female; B9188, skin and skull, female.

Comments. *G. s. lascivus* was retained as a valid subspecies by Hall (1981: 451).

***Sciuropterus sabrinus makkovikensis* Sornborger, 1900**

Ottawa Nat., 14: 48, 6 June.

= *Glaucomys sabrinus makkovikensis* (Sornborger, 1900). See A. H. Howell (1918: 34).

Syntypes. MCZ 10476: Skin and skull. Adult. MCZ 10477: Skin and skull. Adult. MCZ 10478: Skin and skull. Adult.

Locality. (Canada): Labrador Peninsula, Makkovik. 1899.

Collector. W. W. Perrett. Original number 1540.

Condition. MCZ 10476: Skin complete. Skull partial (base of skull missing). Mandible disarticulated.

MCZ 10477: Skin partial (tail broken but present). Skull partial (base of skull missing). Mandible disarticulated.

MCZ 10478: Skin partial (missing left hind foot and tail). Skull partial (occipital chipped). Mandible disarticulated.

Type Series. 3 syntypes only.

Comments. Sornborger's original description was based on three specimens, original numbers 1540, 1541, and 1542, now MCZ 10476, 10477, 10478, respectively. *G. s. makkovikensis* was retained as a valid subspecies by Hall (1981: 453).

***Sciuropterus silus* Bangs, 1896j**

Proc. Biol. Soc. Washington, 10: 163, 28 December.

= *Glaucomys volans volans* (Linnaeus, 1758). See A. H. Howell (1918: 20).

Holotype. B4931. Skin and skull. Adult male.

Locality. (United States): West Virginia, Greenbri-

er County, White Sulphur Springs, top of Katis Mtn. 3,200 ft (976 m). 2 September 1895.

Collector. T. Surber. Original number 19.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

***Sciuropterus volans querceti* Bangs, 1896j**
Proc. Biol. Soc. Washington, 10: 166, 28 December.

= *Glaucomys volans querceti* (Bangs, 1896). See A. H. Howell (1918: 26).

Holotype. B2451. Skin and skull. Adult female.

Locality. (United States): Florida, Citrus County, Citronelle. 17 September 1894.

Collector. F. L. Small. Original number 1363.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 2 paratypes; B2452, skin and skull, adult male; B2453, skin and skull, adult female.

Comments. *G. v. querceti* was retained as a valid subspecies by Hall (1981: 449).

Genus **HYLOPETES** Thomas, 1908

***Pteromys (Hylopetes) alboniger orinus* G. M. Allen, 1940**

The Mammals of China and Mongolia, Natural History of Central Asia, 11: 723, 3 September.

= *Hylopetes alboniger alboniger* (Hodgson, 1836). See Ellerman and Morrison-Scott (1951: 469).

Holotype. MCZ 28086. Skin and skull. Adult female.

Locality. China: Yunnan, Likiang Range (=Lijiang), 7,800 ft (2,379 m). December 1931.

Collector. J. F. Rock.

Condition. Skin complete. Skull partial (most of right tympanic bulla missing, supraoccipital damaged). Mandible disarticulated.

Type Series. Allen examined 10 specimens in addition to the type, including 4 specimens from the BMNH, 3 from AMNH, and MCZ 28087, skin and skull, an unsexed adult.

***Pteromys phayrei anchises* G. M. Allen and Coolidge, 1940**

Bull. Mus. Comp. Zool., 87: 153, 31 December.

= *Hylopetes phayrei anchises* (G. M. Allen and Coolidge, 1940). See Ellerman and Morrison-Scott (1951: 469).

Holotype. MCZ 35776. Skin and skull. Adult male.

Locality. Siam (=Thailand): (Chiang Mai) Mount

Angka (=Doi Inthanon), 4,300 ft (1,312 m). 27 February 1937.

Collector. J. A. Griswold, Jr., Asiatic Primate Expedition. Original number 24.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; MCZ 35775, skin and skull, adult female; MCZ 35777, skin and skull, adult male; MCZ 35778, skin and skull, subadult male.

Genus **MARMOTA** Blumenbach, 1779

***Arctomys flaviventer avarus* Bangs, 1899j**
Proc. New England Zool. Club, 1: 68, 31 July.

= *Marmota flaviventris avara* (Bangs, 1899). See A. H. Howell (1915: 41).

Holotype. B7299. Skin and skull. Juvenile female.

Locality. (Canada): British Columbia, Okanagan. 17 July 1897.

Collector. A. C. Brooks. Original number 969.

Condition. Skin and skull complete.

Type Series. 2 paratypes; B7298, skin and skull, juvenile male; B7300, skin and skull, juvenile female.

Comments. *M. f. avara* was retained as a valid subspecies by Hall (1981: 371).

***Arctomys ignavus* Bangs, 1899d**

Proc. New England Zool. Club, 1: 13, 28 February.

= *Marmota monax ignava* (Bangs, 1899). See A. H. Howell (1915: 29).

Holotype. B7971. Skin and skull. Adult male.

Locality. (Canada): Labrador Peninsula, Black Bay. 13 July 1898.

Collector. E. Doane.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 5 paratypes; B7968–B7970, B7972, B7973 (juvenile); all represented by skin and skull, 4 females and 1 male.

Comments. *M. m. ignava* was retained as a valid subspecies by Hall (1981: 370) and Kwiecinski (1998: 1).

Genus **MICROSCIURUS** J. A. Allen, 1895

***Sciurus (Microsciurus) browni* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39:24, April.

= *Microsciurus alfari browni* (Bangs, 1902). See J. A. Allen (1914:151).

Holotype. MCZ 10404. Skin and skull. Adult male.

Locality. Panama: Chiriqui, Bogaba, 600 ft (183 m). 15 July 1901.

Collector. W. W. Brown, Jr. Original number 631.
Condition. Skin and skull complete.

Type Series. 4 paratypes; MCZ 10405, adult female, 10406, adult female, 10407, adult female, 10408, juvenile male; all represented by skin and skull.

Comments. *M. a. browni* was retained as a valid subspecies by Hall (1981: 439).

Genus *PARAXERUS* Forsyth Major, 1893

Aethosciurus byatti laetus G. M. Allen and Loveridge, 1933

Bull. Mus. Comp. Zool., 75: 96,
February.

= *Paraxerus vexillarius byatti* (Kershaw, 1923). See Amtmann (1975: 11).

Holotype. MCZ 26198. Skin and skull. Adult male.

Locality. Tanganyika Territory (=Tanzania): north end of Lake Nyasa, Ukinga Mountains, Madehani, 7,000 ft (2,135 m). 22 February 1930.

Collector. A. Loveridge.

Condition. Skin and skull complete.

Type Series. 9 paratypes; MCZ 26196, 26197, 26199–26202, 26204–26206; all represented by skin and skull, 4 females and 5 males.

Genus *SCIUROTAMIAS* Miller, 1901

Sciurotamias davidanus thayeri G. M. Allen, 1912b

Mem. Mus. Comp. Zool., 40: 231,
August.

= *Sciurotamias davidanus consobrinus* (Milne-Edwards, 1868). See Moore and Tate (1965: 308).

Holotype. MCZ 8008. Skin and skull. Adult male.

Locality. China: western Szechwan (=Sichuan), Washan (=Wushan), 6,000 ft (1,830 m). 17 May 1908.

Collector. W. R. Zappey. Original number 163.

Condition. Skin complete. Skull partial (basioccipital and left maxilla damaged). Mandible disarticulated.

Type Series. Holotype only.

Comments. G. M. Allen (1912b: 231) noted in the original description of *thayeri* that "unfortunately, the skull of the type was lost." The skin and skull have been reunited subsequently.

Genus *SCIURUS* Linnaeus, 1758

Sciurus (Guerlinguetus) aestuans chiriquensis Bangs, 1902b

Bull. Mus. Comp. Zool., 39: 22, April.

= *Sciurus granatensis chiriquensis* Bangs, 1902. See Hershkovitz (1947: 7).

Holotype. MCZ 10044. Skin and skull. Adult male.

Locality. Panama: Chiriqui, Divala. 18 November 1900.

Collector. W. W. Brown, Jr. Original number 10.
Condition. Skin and skull complete.

Type Series. There is a large series of paratypes in the MCZ.

Comments. *S. g. chiriquensis* was retained as a valid subspecies by Hall (1981: 437) and Nitikman (1985: 1).

Sciurus carolinensis extimus Bangs, 1896j
Proc. Biol. Soc. Washington, 10: 158, 28
December.

Holotype. B4519. Skin and skull. Adult female.

Locality. (United States): Florida, Dade County, Miami. 12 March 1895.

Collector. L. Brownell. Original number 59.

Condition. Skin complete (with bald spots on ventrum). Skull complete.

Type Series. 7 paratypes; B3406, B4517, B4518, (all represented by skin and skull), B4520–B4523 (skins only); 4 females and 3 males.

Comments. Retained as a valid subspecies by Hall (1981: 417) and Koprowski (1994: 1).

Sciurus carolinensis var. yucatanensis J. A. Allen, 1877

In Cones and J. A. Allen, Monogr. N. Amer. Rodentia, U.S. Geol. Geograph. Survey Terr., Rep. 11: 705, August.

= *Sciurus yucatanensis* J. A. Allen, 1877.
See Elliot (1896: 80).

Syntype. MCZ 5398. Skin. Adult male.

Locality. (Mexico): Yucatan, Merida. March 1865.
Collector. A. Schott. Original number 228. Formerly USNM 8502.

Condition. Skin complete.

Type Series. J. A. Allen referred to "four specimens of this variety before me" in the original description (1877: 705). Three specimens are mentioned by number: USNM 8502 (now MCZ 5398), 8503, and 8505. A juvenile referred to in the description (but not by number) corresponds to USNM 8504.

Comments. *S. yucatanensis* was considered a valid species by Hoffman et al. (1993: 443) and Novak (1999: 1265). The syntype of *yucatanensis* in the MCZ was received from the USNM in March 1877. Poole and Schantz (1942: 554) state that USNM 8505 is no longer in the USNM.

Sciurus ludovicianus vicinus Bangs, 1896j
Proc. Biol. Soc. Washington, 10: 150, 28
December.

= *Sciurus niger vulpinus* Gmelin, 1896.
See Barkalow (1954: 25).

Holotype. B5215. Skin and skull. Adult female.

Locality. (United States): West Virginia, Greenbri-

er County, White Sulphur Springs. 29 January 1896.

Collector. T. Surber. Original number 55.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

***Sciurus nesaeus* G. M. Allen, 1902b**

Proc. Biol. Soc. Washington, 15: 93, 25 April.

= *Sciurus granatensis nesaeus* G. M.

Allen, 1902. See Hershkovitz (1947: 37).

Holotype. MCZ 10744. Skin. Adult female.

Locality. Venezuela: (Nueva Esparta), Margarita Island, El Valle. 8 July 1901.

Collector. A. H. Clark. Original number 619.

Condition. Skin complete. The lower incisors are present in the skin.

Type Series. Holotype only.

Comments. *S. g. nesaeus* was retained as a valid subspecies by Cabrera (1961: 367) and Nitikman (1985: 1).

***Sciurus variabilis morulus* Bangs, 1900d**

Proc. New England Zool. Club, 2: 43, 20 September.

= *Sciurus granatensis morulus* Bangs,

1900. See Miller and Kellogg (1955: 257).

Holotype. BS420. Skin and skull. Adult female.

Locality. Panama: Canal Zone, Loma del Leon. 13 March 1900.

Collector. W. W. Brown, Jr. Original number 5.

Condition. Skin complete. Skull slightly damaged (left bulla broken).

Type Series. 5 paratypes; BS418, BS419, BS421–BS423 (juvenile); all represented by skin and skull, 3 females and 2 males.

Comments. *S. g. morulus* was retained as a valid subspecies by Hall (1981: 437) and Nitikman (1985: 1).

***Sciurus variabilis saltuensis* Bangs, 1898o**

Proc. Biol. Soc. Washington, 12: 185, 16 November.

= *Sciurus granatensis saltuensis* Bangs,

1898. See Hershkovitz (1947: 15).

Holotype. BS144. Skin and skull. Adult female.

Locality. Colombia: Magdalena, Santa Marta Mountains, Pueblo Viejo, 8,000 ft (2,440 m). 26 March 1898.

Collector. W. W. Brown, Jr. Original number 112.

Condition. Skin and skull complete.

Type Series. 2 paratypes; BS145, skin and skull, adult male; BS244, skin and skull, adult female.

Comments. *S. g. saltuensis* was retained as a valid

subspecies by Cabrera (1961: 368) and Nitikman (1985: 1).

Genus *SPERMOPHILUS* F. Cuvier, 1825

***Citellus obscurus siccus* G. M. Allen, 1925**

Amer. Mus. Novitates, 163: 3, 2 April.

= *Spermophilus alashanicus* Büchner, 1888. See Hoffmann et al. (1993: 444).

Holotype. MCZ 19924. Skin and skull. Adult female.

Locality. China: Shansi (=Shenxi), 10 miles (16.1 km) west of Taiyuanfu. August 1921.

Collector. F. R. Wulsin. Original number 146.

Condition. Skin complete. Skull partial (parietals and basioccipital missing, right tympanic bulla broken but present). Mandible disarticulated.

Type Series. Holotype only.

***Spermophilus armatus* Kennicott, 1863**

Proc. Acad. Nat. Sci. Philadelphia, 15: 158, June.

Syntypes. MCZ 297: Skull. Male. Collected 11 April 1858. Original number 167, formerly USNM 4799.

MCZ 4793: Skin and skull. Male. Collected 2 April 1858. Original number 140, formerly USNM 3478 (3373).

MCZ 4790: Skin. Female. Collected 26 May 1858. Original number 455, formerly USNM 3470 (3470).

MCZ 4794: Skull only (skin spoiled in reparation, discarded). Male. Collected April 14, 1858. Original number 215, formerly USNM 3474 (3373).

Locality. (United States): Utah (now Wyoming), (Uinta County), near Fort Bridger, foothills of the Uinta Mountains, Camp Scott.

Collector. C. Drexler.

Type Series. See comments below.

Comments. Considered a valid species by Hoffmann et al. (1993: 444) and Nowak (1999: 1254). Kennicott does not designate a type in the original description; thus, "all the specimens from Fort Bridger collected by C. Drexler and in the collections [of the USNM] prior to 1863 are evidently cotypes [=syntypes] of this species" (Lyon and Osgood 1909: 163). The syntypes of *armatus* in the MCZ were received from the USNM in January 1874. These specimens possess USNM labels that bear numbers in discrepancy with the USNM catalogue; the numbers listed above are taken from the catalogue of the USNM, followed in parentheses by the number on the specimen label. A complete list of syntypes, most of the remainder of which are in the USNM, can be found in Poole and Schantz (1942: 504–505). The skin of MCZ 297, which formerly bore the number USNM 3472, is not to be found in the collections of either museum.

***Spermophilus elegans* Kennicott, 1863**

Proc. Acad. Nat. Sci. Philadelphia, 15: 158, June.

Syntypes. MCZ 4791: Skin. Female. Collected 11 April 1858. Original number 168. Formerly USNM 3468. MCZ 4792: Skin. Male. Collected 11 April 1858. Original number 166. Formerly USNM 3473.

Locality. (United States): Utah (now Wyoming), (Uinta County), Fort Bridger.

Collector. C. Drexler.

Condition. Following their receipt, these specimens were spoiled in reparation and discarded.

Type Series. See comments below.

Comments. These specimens are no longer in existence. Kennicott does not designate a type in the original description; thus, "all the specimens from Fort Bridger collected by C. Drexler and in the collections [of the USNM] prior to 1863 are evidently cotypes [=syntypes] of this species" (Lyon and Osgood 1909: 163). These syntypes of *elegans* were received from the USNM in January 1874. A complete list of syntypes can be found in Lyon and Osgood (1909: 166). G. M. Allen (1931: 251) erroneously included MCZ 4791 in a list of the type series of *Spermophilus armatus*. *S. elegans* is considered a valid species by Hoffmann et al. (1993: 446) and Nowak (1999: 1254).

***Spermophilus (Ictidomys) tridecemlineatus badius* Bangs, 1899c**

Proc. New England Zool. Club, 1: 1, 8 February.

= *Spermophilus tridecemlineatus texensis*

Merriam, 1898. See Hall and Kelson (1959: 347).

Holotype. B1682. Skin and skull. Adult male.

Locality. (United States): Missouri (Vernon County), Stotesbury. 17 April 1894.

Collector. T. Surber. Original number S1.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 2 paratypes; B1683, skin and skull, adult male; B5609, skin and skull, adult male.

Comments. A. H. Howell (1938: 110) first synonymized *badius* with *texensis* under the genus *Citellus*.

Genus *SYNTHEOSCIURUS* Bangs, 1902***Syntheosciurus brochus* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39: 25, April.

Holotype. MCZ 10402. Skin and skull. Adult male.

Locality. Panama: Chiriqui, Boquete (=Bajo Boquete), 7,000 ft (2,135 m). 30 April 1901.

Collector. W. W. Brown, Jr. Original number 415.

Condition. Skin complete. Skull partial (left supra-occipital damaged)

Type Series. 1 paratype; MCZ 10403, skin and skull, adult female.

Comments. Type species of the genus *Syntheosciurus* Bangs, 1902. Considered a valid species by Hoffman et al. (1993: 452) and Nowak (1999: 1268). Following a discussion with a collector employed by W. W. Brown, Jr., and a biological survey of Boquete, Enders (1953b: 509) recommended that the type locality be considered "the Cordillera about 8 miles [12.9 km] north of Boquete and not at Boquete which is on the lower slopes of El Volcan de Chiriqui."

Genus *TAMIAS* Illiger, 1811***Tamias cooperi* Baird, 1855**

Proc. Acad. Nat. Sci. Philadelphia, 7: 334, 24 April 24.

= *Tamias townsendii cooperi* Baird, 1855.

See Baird (1858: 737).

Syntype. MCZ 4754. Skin only. Adult, unsexed.

Locality. (United States): Washington (Skagit County), Clickitat (=Klickitat) Pass, Cascade Mountains, 4,500 ft (1,373 m). July 1853. See comments.

Collector. J. G. Cooper. Formerly USNM 211/1182.

Condition. Skin complete.

Type Series. The other syntype is USNM 212/1183, skin and skull, unsexed adult.

Comments. No type is designated in the original description, but Baird subsequently explained that the two specimens listed above were those on which *cooperi* was based (1858: 301). Cooper (1869: 531) emended the type locality. The syntype of *cooperi* in the MCZ was received from the USNM in January 1874.

***Tamias dorsalis* Baird, 1855**

Proc. Acad. Nat. Sci. Philadelphia, 7: 332, 24 April.

= *Tamias dorsalis dorsalis* Baird, 1855.

See Hayman and Holt (1940: 435).

Syntype. MCZ 4759. Skin and mandible.

Locality. (United States): New Mexico (Grant County), "Fort Webster, Coppermines of the Mimbres" (near present Georgetown). 32°47'N, 108°41'W. 1851. See A. H. Howell (1929: 131).

Collector. J. H. Clark. Formerly USNM 119/3151.

Condition. Skin complete. Mandible partial (posterior of right mandibular ramus broken off and missing).

Type Series. The other syntype is USNM 120, skull within skin.

Comments. No type is designated in the original description, but Baird subsequently listed the two

specimens above as those on which *dorsalis* was based (1858: 300). The syntype of *dorsalis* in the MCZ was received from the USNM in January 1874.

***Tamias quadrivittatus neglectus* J. A. Allen, 1890**

Bull. Amer. Mus. Nat. Hist., 3: 106, June.

= *Tamias minimus neglectus* (J. A. Allen, 1890). See Hayman and Holt (1940: 430).

Holotype. MCZ 1575. Skin and cranium.

Locality. (Canada): (Ontario), eastern end of Lake Superior (near mouth of Montreal River). 5 July 1848.

Collector. L. Agassiz.

Condition. Skin complete. Cranium partial (zygomatic arches, parietals, left tympanic bulla, and mandible missing).

Type Series. The description mentions 6 paratypes, including MCZ 1567, skin and skull; and 4 others at USNM.

Comments. Following A. H. Howell (1929: 54), Hayman and Holt (1940: 430) considered *T. m. neglectus* a synonym of *T. m. borealis*. However, *neglectus* was retained as a valid subspecies of *minimus* by Hall (1981: 346) under the genus *Eutamias*.

***Tamias striatus venustus* Bangs, 1896h**

Proc. Biol. Soc. Washington, 10: 137, 28 December.

Holotype. B547S. Skin and skull. Adult male.

Locality. (United States): Indian Territory (=Oklahoma) (Adair County), Stilwell. 13 August 1896.

Collector. T. Surber. Original number 63.

Condition. Skin complete. Skull partial (condyle of left mandibular ramus missing).

Type Series. 2 paratypes; B5479, skin and skull, adult female; B5605, skin and skull, adult male.

Comments. Retained as a valid subspecies by Hall (1981: 340).

Genus *TAMIASCIURUS* Trouessart, 1880

***Sciurus hudsonicus gymnicus* Bangs, 1899f**

Proc. New England Zool. Club, 1: 28, 31 March.

= *Tamiasciurus hudsonicus gymnicus*

(Bangs, 1899). See Osgood (1938: 438).

Holotype. B4914. Skin and skull. Adult female.

Locality. (United States): Maine, Piscataquis

County, Greenville, near Moosehead Lake. 1 December 1895.

Collector. C. H. Goldthwaithe. Original number 2.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. *T. h. gymnicus* was retained as a valid subspecies by Hall (1981: 442) and Steele (1998: 1).

***Sciurus hudsonicus loquax* Bangs, 1896j**

Proc. Biol. Soc. Washington, 10: 161, 28 December.

= *Tamiasciurus hudsonicus loquax*

(Bangs, 1896). See A. H. Howell (1936: 1).

Holotype. B4270. Skin and skull. Adult male.

Locality. (United States): Connecticut, New London County, Liberty Hill. 24 December 1895.

Collector. O. Bangs. Original number 3.

Condition. Skin and skull complete.

Type Series. There is a large series of paratypes in the MCZ.

Comments. *T. h. loquax* was retained as a valid subspecies by Hall (1981: 443) and Steele (1998: 1).

***Sciurus hudsonicus orarius* Bangs, 1897i**

Proc. Biol. Soc. Washington, 11: 281, 30 December.

= *Tamiasciurus douglasii mollipilosus*

(Audubon and Bachman, 1841). See Hayman and Holt (1940: 347).

Holotype. B497S. Skin and skull. Adult female.

Locality. (United States): California, Mendocino County, Philo. 9 December 1895.

Collector. C. A. Allen. Original number 887.

Condition. Skin complete. Skull partial (right tympanic bulla broken).

Type Series. 13 paratypes; B4832, B4979–B4989, B5462; all represented by skin and skull, 9 females and 4 males.

Family CASTORIDAE Hemprich, 1820

Genus *CASTOR* Linnaeus, 1758

***Castor caecator* Bangs, 1913**

Bull. Mus. Comp. Zool., 54: 513, July.

= *Castor canadensis caecator* Bangs,

1913. See G. M. Allen (1942: 62).

Holotype. B6979. Skull. Adult male.

Locality. (Canada): Newfoundland, near Bay St. George. 1896.

Collector. E. Doane.

Condition. Skull complete. Mandible disarticulated.

Type Series. Holotype only.

Comments. *C. c. caecator* was retained as a valid subspecies by Hall (1981: 602).

Family GEOMYIDAE Bonaparte, 1845

Genus GEOMYS Rafinesque, 1817

***Geomys colonus* Bangs, 1898b**

Proc. Boston Soc. Nat. Hist., 28: 178, 15 March.

= *Geomys pinetis pinetis* Rafinesque, 1817. See Williams and Genoways (1980: 444).

Holotype. B5001. Skin and skull. Adult male.

Locality. (United States): Georgia, Camden County, Arnot Plantation, about 4 miles (6.4 km) west of St. Mary's. 21 March 1896.

Collector. O. Bangs. Original number 8.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. Hall (1981: 505) recognized *Geomys colonus* as a valid species.

***Geomys cumberlandius* Bangs, 1898b**

Proc. Boston Soc. Nat. Hist., 28: 180, 15 March.

= *Geomys pinetis pinetis* Rafinesque, 1817. See Williams and Genoways (1980: 444).

Holotype. B5016. Skin and skull. Adult male.

Locality. (United States): Georgia, Camden County, Cumberland Island, Stafford Place. 17 April 1896.

Collector. O. Bangs. Original number 1.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. In the original description, Bangs lists B5015 as the type and gives its data. The data given fit B5016, not B5015. B5016 has "Type" written after the entry in Bangs' catalogue and should be considered the holotype, rather than B5015. Hall (1981: 505) and Laerm (1981: 150) supported the specific status of *Geomys cumberlandius*.

***Geomys floridanus austrinus* Bangs, 1898b**

Proc. Boston Soc. Nat. Hist., 28: 177, 15 March.

= *Geomys pinetis pinetis* Rafinesque, 1817. See Williams and Genoways (1980: 444).

Holotype. B6983. Skin and skull. Adult male.

Locality. (United States): Florida, Pinellas County, Belleair. 3 August 1897.

Collector. W. S. Dickinson.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype, in the USNM.

***Geomys tuza goffi* Sherman, 1944**

Proc. New England Zool. Club, 23: 38, 30 August.

= *Geomys pinetis goffi* Sherman, 1944. See Harper (1952: 37).

Holotype. B7222. Skin and skull. Adult male.

Locality. (United States): Florida, Brevard County, Eau Gallie. 18 March 1897.

Collector. O. Bangs. Original number 1.

Condition. Skin and skull complete.

Type Series. 12 paratypes; B7212–B7217, B7219–B7221; all represented by skin and skull, 5 females and 7 males.

Comments. Williams and Genoways (1980: 444) synonymized *goffi* with *G. pinetis pinetis*; however, Hall (1981: 504) maintained *G. p. goffi* as a valid subspecies. The IUCN designates *goffi* as extinct.

Genus ORTHOGEOMYS Merriam, 1895

***Macrogeomys cavator* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39: 42, April.
= *Orthogeomys cavator cavator* (Bangs, 1902). See Russell (1968a: 532).

Holotype. MCZ 10351. Skin and skull. Adult male.

Locality. Panama: Chiriqui, Boquete (=Bajo Boquete), 4,800 ft (1,464 m). 9 March 1901.

Collector. W. W. Brown, Jr. Original number 212.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a large series of paratypes in the MCZ.

Comments. *O. cavator* was considered a valid species by Patton (1993: 470) and Nowak (1999: 1314).

***Macrogeomys pansa* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39: 44, April.
= *Orthogeomys cavator pansa* (Bangs, 1902). See Russell (1968a: 532).

Holotype. MCZ 10364. Skin and skull. Adult female.

Locality. Panama: Chiriqui, Bogaba, 600 ft (183 m). 6 July 1901.

Collector. W. W. Brown, Jr. Original number 567.

Condition. Skin complete. Skull partial (right tympanic bulla missing).

Type Series. There are 7 paratypes; MCZ 10362–10363, 10365–10369, 4 females and 3 males, all represented by skin and skull. MCZ 10362 and 10366 are now in the FMNH, and MCZ 10365 is in the USNM.

Comments. *O. c. pansa* was retained as a valid subspecies by Hall (1981: 513).

***Orthogeomys grandis pluto* Lawrence, 1933a**

Proc. New England Zool. Club, 13: 66, 8 May.

Holotype. MCZ 29040. Skin and skull. Adult female.

Locality. Honduras: Francisco Morazan, north of Tegucigalpa, Cerro Cantoral. 20 July 1932.

Collector. C. F. Underwood. Original number 1100.

Condition. Skin and skull complete.

Type Series. 2 paratypes; MCZ 29038, skin and skull, juvenile female; MCZ 29039, skin and skull, unsexed juvenile.

Comments. Retained as a valid subspecies by Hall (1981: 509).

Genus *PAPPOGEOMYS* Merriam, 1895***Cratogeomys castanops rubellus* Nelson and Goldman, 1934a**

Proc. Biol. Soc. Washington, 47: 147, 13 June.

= *Pappogeomys castanops rubellus* (Nelson and Goldman, 1934). See Russell (1968b: 682).

Holotype. MCZ 20507. Skin and skull. Adult male.

Locality. Mexico: San Luis Potosí, near San Luis Potosí, Soledad, 6,400 ft (1,952 m). 1 August 1923.

Collector. W. W. Brown, Jr. Original number 231.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a large paratype series in the MCZ.

Comments. *P. c. rubellus* was retained as a valid subspecies by Hall (1981: 520).

Genus *THOMOMYS* Wied-Neuwied, 1839***Thomomys umbrinus atrodorsalis* Nelson and Goldman, 1934b**

J. Mammal., 15: 111, 15 May.

Holotype. MCZ 20487. Skin and skull. Adult male.

Locality. Mexico: San Luis Potosí, Alvarez, 8,000 ft (2,440 m). 7 November 1923.

Collector. W. W. Brown, Jr. Original number 338.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a large series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 476).

Family HETEROMYIDAE Gray, 1868**Genus *DIPODOMYS* Gray, 1841*****Dipodomys californicus pallidulus* Bangs, 1899j**

Proc. New England Zool. Club, 1: 65, 31 July.

= *Dipodomys californicus californicus* Merriam, 1890. See Kelt (1988: 1).

Holotype. B9147. Skin and skull. Adult female.

Locality. (United States): California, Colusa County, Sites. 27 June 1896.

Collector. P. O. Simons. Original number 222.

Condition. Skin complete. Skull partial (left jugal missing).

Type Series. 1 paratype; B9148, skin and skull, adult female.

***Dipodops ordii palmeri* J. A. Allen, 1891**

Bull. Amer. Mus. Nat. Hist., 3: 276, 30 June.

= *Dipodomys ordii palmeri* (J. A. Allen, 1891). See Grinnell (1921: 96).

Syntypes. MCZ 5886: Skin and skull. Juvenile male. MCZ 5887: Skin and skull. Unsexed juvenile.

Locality. Mexico: San Luis Potosí, San Luis Potosí. 1 May 1878.

Collector. E. Palmer.

Condition. MCZ 5886: Skin complete. Skull partial (part of parietal, right occipital condyle, and tympanic bulla missing). MCZ 5887: Skin complete. Skull partial (left squamosal process missing). Mandible disarticulated.

Type Series. 2 syntypes only.

Comments. Allen did not specify a holotype in the original description, which he based on the two specimens above. *D. o. palmeri* was retained as a valid subspecies by Hall (1981: 569).

Genus *HETEROMYS* Desmarest, 1817***Heteromys repens* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39: 45, April.

= *Heteromys desmarestianus repens* Bangs, 1902. See Goldman (1920: 115).

Holotype. MCZ 10356. Skin and skull. Adult female.

Locality. Panama: Chiriqui, Boquete (=Bajo Boquete), 4,000 ft (1,220 m). 8 April 1901.

Collector. W. W. Brown, Jr. Original number 264.

Condition. Skin complete. Skull partial (left jugal and process of squamosal missing).

Type Series. 5 paratypes; MCZ 10359, adult male, 10355, adult male, 10358, adult male, 10361, juvenile female, 10360, juvenile female.

Comments. *H. d. repens* was retained as a valid subspecies by Hall (1981: 597).

Genus *LIOMYS* Merriam, 1902

Heteromys alleni Coues, 1881

In J. A. Allen, *Bull. Mus. Comp. Zool.*, 8: 187, March.

= *Liomys irroratus alleni* (Coues, 1881).

See Goldman (1911: 56).

Holotype. MCZ 5889. Skin and skull. Male.

Locality. (Mexico): San Luis Potosí, Rio Verde, Hacienda Angostura. 26 February 1878.

Collector. E. Palmer.

Condition. Skin complete, skull within skin.

Type Series. Holotype only.

Comments. *L. i. alleni* was retained as a valid subspecies by Hall (1981: 590).

Genus *PEROGNATHUS* Wied-Neuwied, 1839

Perognathus longimembris bangsi Mearns, 1898

Bull. Amer. Mus. Nat. Hist., 10: 300, 31 August.

Holotype. B5304. Skin and skull. Adult female.

Locality. (United States): California, (Riverside County), Colorado Desert, Palm Springs, 450 ft (137 m). 13 April 1896.

Collector. E. C. Thurber. Original number 644.

Condition. Skin complete. Skull partial (teeth separate from skull). Mandible disarticulated.

Type Series. 2 paratypes; B5302, adult male, skin and skull; B5303, adult female, skin and skull.

Comments. Retained as a valid subspecies by Hall (1981: 537).

Family DIPODIDAE Fischer de Waldheim, 1817

Genus *ZAPUS* Coues, 1875

Zapus hudsonius hardyi Batchelder, 1899
Proc. New England Zool. Club, 1: 5, 8 February.

= *Zapus hudsonicus acadicus* (Dawson, 1856). See Krutzsch (1954: 432).

Holotype. MCZ 41681. Skin and skull. Adult female.

Locality. (United States): Maine, Hancock County, Mount Desert Island. 24 August 1898.

Collector. C. F. Batchelder. Original number 1597.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Zapus hudsonius ladas Bangs, 1899d
Proc. New England Zool. Club, 1: 10, 28 February.

Holotype. B4169. Skin and skull. Adult female.

Locality. (Canada): Labrador, Hamilton Inlet, Rigoulette. 18 July 1895.

Collector. C. H. Goldthwaite. Original number 2.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a large series of paratypes, most of which are in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 843).

Zapus orarius Preble, 1899

N. Amer. Fauna, 15: 29, 8 August.

= *Zapus trinotatus orarius* Preble, 1899.

See Hooper (1944: 67).

Holotype. B250. Skin and skull. Adult male.

Locality. (United States): California, Marin County, Point Reyes. 14 May 1893.

Collector. C. A. Allen. Original number 618.

Condition. Skin and skull complete.

Type Series. 3 paratypes, not in MCZ; mentioned by locality in original description.

Comments. *Z. t. orarius* was retained as a valid subspecies by Hall (1981: 846) and Gannon (1988: 1).

Family MURIDAE Illiger, 1811

Subfamily ARVICOLINAE Gray, 1821

Genus *CHIONOMYS* Miller, 1908

Hypodaeus nivicola Schinz, 1845

Syst. Verzeichniss Säugethiere Synopsis Mammalium, 2: 236.

= *Chionomys nivalis* (Martins, 1842). See Musser and Carleton (1993: 507).

Syntype. MCZ 1291. Skin. Juvenile female.

Locality. Switzerland: St. Gotthard.

Collector. Received from L. Agassiz.

Condition. Skin complete.

Type Series. Schinz wrote that he had examined 16 specimens, "junge und alte."

Comments. G. M. Allen discussed the somewhat uncertain type status of this specimen (1931: 263).

The original label bears the following: "Hypodaeus [sic] nivicola juv. ♀ sp. nov. du St. Gotthard et du Faulhorn." Louis Agassiz, a student of Schinz's, deposited the specimen in the MCZ.

Genus *CLETHRIONOMYS* Tilesius, 1850*Evotomys proteus* Bangs, 1897g

In Bailey, Proc. Biol. Soc. Washington, 11: 137, 13 May.

= *Clethrionomys gapperi proteus* (Bangs, 1897). See Jackson (1938: 433).

Holotype. B4081. Skin and skull. Adult female.

Locality. (Canada): Labrador, Hamilton Inlet. 27 August 1895.

Collector. C. H. Goldthwaite. Original number 10.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a large series of paratypes in the MCZ.

Comments. *C. g. proteus* was retained as a valid subspecies by Hall (1981: 783).

Genus *DICROSTONYX* Gloger, 1841*Dicrostonyx chionopaes* G. M. Allen, 1914b

Proc. New England Zool. Club, 5: 62, 9 April.

= *Dicrostonyx torquatus chionopaes* G. M. Allen, 1914. See Ognev (1948: 507).

Holotype. MCZ 15263. Skin and skull. Adult male.

Locality. U.S.S.R. (=Russian Federation): eastern Siberia, Nijni Kolymsk (Nizhnekolymsk), near mouth of Kolyma River. 15 October 1911.

Collector. J. Koren. Original number 257.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Dicrostonyx exsul G. M. Allen, 1919a

Bull. Mus. Comp. Zool., 62: 532, February.

Holotype. MCZ 11885. Skin and skull. Adult male.

Locality. (United States): (Alaska), St. Lawrence Island. 24 June 1913.

Collector. J. Dixon. Original number 3267.

Condition. Skin complete. Skull partial (basioccipital and right tympanic bulla missing). Mandible disarticulated.

Type Series. 3 paratypes; MCZ 11883, skin and skull, female; MCZ 11884, skin and skull, female; USNM 232007, skin and skull, female.

Comments. Considered a valid species by Musser and Carleton (1993: 510) but included in *D. groenlandicus* by Nowak (1999: 1479).

Genus *EOTHENOMYS* Miller, 1896*Craseomys aquilus* G. M. Allen, 1912b

Mem. Mus. Comp. Zool., 40: 216, August.

= *Eothenomys eva eva* (Thomas, 1911). See G. M. Allen (1940: 837).

Holotype. MCZ 7190. Skin and skull. Adult male.

Locality. China: Hupeh (=Hubei), Showlungtan. 17 May 1907.

Collector. W. R. Zappey. Original number 10.

Condition. Skin complete. Skull partial (hole in left parietal, occiput missing).

Type Series. 5 paratypes; MCZ 7189, 7191–7194, 7196; all represented by skin and skull, all female.

Microtus (Eothenomys) aurora G. M. Allen, 1912b

Mem. Mus. Comp. Zool., 40: 211, August.

= *Eothenomys melanogaster aurora* (G. M. Allen, 1912). See Hinton (1923: 149).

Holotype. MCZ 7788. Skin and skull. Male.

Locality. China: Hupeh (=Hubei), Changyanghsieh. 2 February 1909.

Collector. W. R. Zappey. Original number 372.

Condition. Skin and skull complete.

Type Series. 3 paratypes; MCZ 7185, skin and skull, female; MCZ 7186, skin and skull, male; MCZ 7188, skin and skull, male.

Comments. *E. m. aurora* was retained as a valid subspecies by Zhang et al. (1997: 229).

Microtus (Eothenomys) mucronatus G. M. Allen, 1912b

Mem. Mus. Comp. Zool., 40: 214, August.

= *Eothenomys melanogaster melanogaster* (Milne-Edwards, 1871). See G. M. Allen (1940: 806).

Holotype. MCZ 7789. Skin and skull. Adult female.

Locality. China: western Szechwan (=Sichuan), Tachiao, 12,000 ft (3,660 m). 11 August 1908.

Collector. W. R. Zappey. Original number 269.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; MCZ 7790, skin and skull, adult female (exchanged to the BMNH); MCZ 7791, skin and skull, adult female; MCZ 7803, skin and skull, juvenile female.

Genus *LEMMUS* Link, 1795*Lemmus paulus* G. M. Allen, 1914b

Proc. New England Zool. Club, 5: 60, 9 April.

= *Lemmus sibiricus chrysogaster* J. A.

Allen, 1903. See Ellerman and Morrison-Scott (1951: 656).

Holotype. MCZ 15268. Skin and skull. Adult male.

Locality. (Russian Federation): northeastern Siberia, Kalaschowo, near mouth of Kolyma River. 22 June 1912.

Collector. J. Koren. Original number 152.

Condition. Skin complete. Skull partial (left mandibular ramus missing).

Type Series. 1 paratype; MCZ 15267, skin, female.

Genus *MICROTUS* Schrank, 1798*Arvicola breweri* Baird, 1858

Mammals, in Repts. Explor. Surveys Railr. to Pacific, 8(1): 525, 14 July.

= *Microtus breweri* (Baird, 1858). See Miller (1896: 83).

Syntype. MCZ 4365. Body in alcohol. Formerly USNM 2833.

Locality. (United States): Massachusetts, Nantucket County, off Nantucket Island, Muskeget (=Muskeget) Island. July 1856.

Collector. T. M. Brewer.

Condition. Alcoholic.

Type Series. There are 5 other syntypes (see Poole and Schantz, 1942: 271–272), all of which were at one time in the USNM.

Comments. Poole and Schantz (1942: 271) noted that USNM 2829, a syntype of *breweri*, could not be found.

Arvicola riparia var. *longipilis* Baird, 1858

Mammals, in Repts. Explor. Surveys Railr. to Pacific, 8(1): 524, 14 July.

= *Microtus pennsylvanicus pennsylvanicus* (Ord, 1815). See Bailey (1900: 16).

Syntype. MCZ 5292. Skin and skull.

Locality. (United States): Illinois, (Cook County), West Northfield. Spring 1855.

Collector. R. Kennicott. Formerly USNM 745.

Condition. Skin complete. Skull partial (part of parietal, both tympanic bullae and palatine missing). Mandible disarticulated.

Type Series. See comments.

Comments. G. M. Allen (1931: 260), mentioned that “although no individuals are mentioned [in Baird’s description], . . . [this] specimen was undoubtedly among those examined by Baird in preparing his diagnosis and, therefore, is a cotype

[=syntype].” Baird’s specimens were collected by Kennicott at West Northfield, Illinois, and by Hoy at Racine, Wisconsin, and were apparently deposited in the USNM. Lyon and Osgood (1909) and Poole and Schantz (1942) make no mention of other syntypes.

Arvicola rufidorsum Baird, 1858

Repts. Explor. Surveys Railr. to Pacific, 8(1): 526, 14 July.

= *Microtus pennsylvanicus pennsylvanicus* (Ord, 1815). See Bailey (1900: 16).

Holotype. MCZ 54372. Skin and skull.

Locality. (United States): Massachusetts, (Duke’s County), Martha’s Vineyard, Holmes Hole.

Collector. D. J. Wyman.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Comments. This specimen has formerly been BSNH 1949 and USNM 901.

Arvicola terraenovae Bangs, 1894a

Proc. Biol. Soc. Washington, 9: 129, 27 July.

= *Microtus pennsylvanicus terraenovae* (Bangs, 1894). See Davis (1936: 290).

Holotype. B1104. Skin and skull. Adult male.

Locality. (Canada): Newfoundland, Codroy. 27 November 1893.

Collector. E. Doane. Original number 4.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. *M. p. terraenovae* was retained as a valid subspecies by Hall (1981: 796).

Microtus chrotorrhinus ravus Bangs, 1898p

Proc. Biol. Soc. Washington, 12: 188, 16 November.

Holotype. B7951. Skin and skull. Adult male.

Locality. (Canada): Labrador, Strait of Belle Isle, Black Bay. 15 July 1898.

Collector. E. Doane. Original number 4.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Paratype material consists of Bangs’ series from the type locality; B7952–7967, all represented by skin and skull, 10 females, 3 males, and 3 unsexed individuals. B7953 and B7955 were exchanged to MVZ in 1937; B7964 was exchanged to USNM in 1922.

Comments. Retained as a valid subspecies by Hall (1981: 811) and Kirkland and Jannett (1982: 1).

***Microtus enixus* Bangs, 1896g**

Amer. Nat., 30: 1051, 1 December.

= *Microtus pennsylvanicus enixus* Bangs, 1896. See Davis (1936: 290).**Holotype.** B3973. Skin and skull. Adult female.**Locality.** (Canada): Labrador, Hamilton Inlet. 15 July 1895.**Collector.** C. H. Goldthwaite. Original number 4.**Condition.** Skin and skull complete.**Type Series.** There is a large series of paratypes in the MCZ.**Comments.** *M. p. enixus* was retained as a valid subspecies by Hall (1981: 793).***Microtus fontigenus* Bangs, 1896d**

Proc. Biol. Soc. Washington, 10: 48, 9 March.

= *Microtus pennsylvanicus fontigenus* Bangs, 1896. See Miller (1897: 14).**Holotype.** B3837. Skin and skull. Adult female.**Locality.** (Canada): Quebec, Lake Edward. 28 September 1895.**Collector.** E. A. and O. Bangs. Original number 9.**Condition.** Skin and skull complete. Mandible disarticulated.**Type Series.** 7 paratypes; B3838–B3844; all represented by skin and skull, 2 females and 5 males.**Comments.** *M. p. fontigenus* was retained as a valid subspecies by Hall (1981: 793).***Microtus koreni* G. M. Allen, 1914b**

Proc. New England Zool. Club, 5: 64, 9 April.

= *Microtus oconomus koreni* G. M. Allen, 1914. See Ellerman and Morrison-Scott (1951: 706).**Holotype.** MCZ 15213. Skin and skull. Adult female.**Locality.** (Russian Federation): northeastern Siberia, Nijni Kolymsk (=Nizhnekolymsk), near mouth of Kolyma River. 1 November 1911.**Collector.** J. Koren. Original number 132.**Condition.** Skin complete. Skull partial (left tympanic bulla broken, right mandibular ramus missing).**Type Series.** There is a large series of paratypes in the MCZ.***Microtus pennsylvanicus* [sic] *shattucki* Howe, 1901**

Proc. Portland Soc. Nat. Hist., 2: 201, 31 December.

= *Microtus pennsylvanicus shattucki* Howe, 1901. See Wyman (1922: 162).**Holotype.** MCZ 10011. Skin and skull. Adult female.**Locality.** (United States): Maine, Penobscot Bay,

near Long Island, Tumble Down Dick Island. 10 July 1900.

Collector. R. H. Howe and G. C. Shattuck. Original number 31.**Condition.** Skin and skull complete.**Type Series.** There is a small series of paratypes in the MCZ.**Comments.** Wyman (1922: 166) considered *M. p. shattucki* a synonym of *M. p. pennsylvanicus*, but Hall (1981: 796) retained it as a separate subspecies.***Microtus pennsylvanicus acadicus* Bangs, 1897c**

Amer. Nat., 31: 239, 1 March.

Holotype. B2155. Skin and skull. Adult female.**Locality.** Canada: Nova Scotia, Digby. 22 July 1894.**Collector.** O. Bangs.**Condition.** Skin and skull complete.**Type Series.** There is a series of paratypes in the MCZ.**Comments.** Retained as a valid subspecies by Hall (1981: 792).***Microtus provectus* Bangs, 1908**

Proc. New England Zool. Club, 4: 20, 6 March.

= *Microtus pennsylvanicus provectus* Bangs, 1908. See Chamberlain (1954: 589).**Holotype.** B9794. Skin and skull. Adult female.**Locality.** (United States): Rhode Island, Block Island. 5 August 1899.**Collector.** O. Bangs. Original number 11.**Condition.** Skin complete. Skull partial (tympanic bullae broken). Mandible disarticulated and angular process chipped.**Type Series.** There is a series of paratypes in the MCZ.**Comments.** *M. p. provectus* was retained as a valid subspecies by Hall (1981: 796).**Genus *MYOPUS* Miller, 1910*****Myopus thayeri* G. M. Allen, 1914b**

Proc. New England Zool. Club, 5: 58, 9 April.

= *Myopus schisticolor thayeri* G. M. Allen, 1914. See Ognev (1948: 526).**Holotype.** MCZ 15264. Skin and skull. Adult male.**Locality.** (Russian Federation): northeastern Siberia, Yakutsk, Nijni Kolymsk (=Nizhnekolymsk), near mouth of Kolyma River. 28 March 1912.**Collector.** J. Koren. Original number 264.**Condition.** Skin and skull complete. Mandible disarticulated.

Comments. 1 paratype; MCZ 15265, skin and skull, male.

Genus *ONDATRA* Link, 1795

Fiber obscurus Bangs, 1894b

Proc. Biol. Soc. Washington, 9: 133, 15 September.

= *Ondatra zibethicus obscurus* (Bangs, 1894). See Cameron (1959: 85).

Holotype. B1155. Skin and skull. Adult female.

Locality. (Canada): Newfoundland, Codroy. 14 May 1894.

Collector. E. Doane. Original number 3.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a small series of paratypes in the MCZ.

Comments. *O. z. obscurus* was retained as a valid subspecies by Hall (1981: 827).

Fiber zibethicus aquilonius Bangs, 1899d

Proc. New England Zool. Club, 1: 11, 28 February.

= *Ondatra zibethicus aquilonius* (Bangs, 1899). See Miller (1912:231).

Holotype. B3957. Skin and skull. Adult male.

Locality. (Canada): Labrador, Hamilton Inlet, Rigoulette. 15 August 1895.

Collector. C. H. Goldthwaite. Original number 11. *Condition.* Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; B7974, skin and skull, adult female; B7975, skin and skull, juvenile; B8704, skull, juvenile.

Comments. *O. z. aquilonius* was retained as a valid subspecies by Hall (1981: 825).

Fiber zibethicus rivalicius Bangs, 1895b

Proc. Boston Soc. Nat. Hist., 26: 541, 31 July.

= *Ondatra zibethicus rivalicius* (Bangs, 1895). See Davis and Lowery (1940: 212).

Holotype. B2719. Skin and skull. Adult male.

Locality. (Canada): Louisiana, Plaquemines Parish, Burbridge. 31 January 1895.

Collector. F. L. Small. Original number 1556/165.

Condition. Skin and skull complete.

Type Series. 4 paratypes; B2720, skin and skull, adult female; B2721, skin and skull, adult male; B2883, skin and skull, male; B2884, skin and skull, male.

Comments. *O. z. rivalicius* was retained as a valid subspecies by Hall (1981: 827).

Genus *PHENACOMYS* Merriam, 1889

Phenacomys celatus crassus Bangs, 1900c

Proc. New England Zool. Club, 2: 39, 20 September.

= *Phenacomys ungava crassus* Bangs, 1900. See A. B. Howell (1926: 27).

Holotype. B3959. Skin and skull. Adult male.

Locality. (Canada): Labrador, Hamilton Inlet, Rigoulette. 15 August 1895.

Collector. C. H. Goldthwaite. Original number 1.

Condition. Skin and skull complete.

Type Series. There is a small series of paratypes, most of which are no longer in the MCZ.

Comments. In the original description, "3946" is a misprint for 3964.

Genus *SYNAPTOMYS* Baird, 1858

Synaptomys fatuus Bangs, 1896d

Proc. Biol. Soc. Washington, 10: 47, 9 March.

= *Synaptomys cooperi cooperi* Baird, 1858. See Wetzel (1955:8).

Holotype. B3857. Skin and skull. Adult female.

Locality. (Canada): Quebec, Lake Edward. 28 September 1895.

Collector. E. A. and O. Bangs. Original number 3.

Condition. Skin and skull complete.

Type Series. 5 paratypes; B3854–B3856, B3858–B3862; all represented by skin and skull, 3 females and 5 males.

Synaptomys (Mictomys) innuitus

medioximus Bangs, 1900c

Proc. New England Zool. Club, 2: 40, 20 September.

= *Synaptomys borealis medioximus* Bangs, 1900. See A. B. Howell (1927: 9).

Holotype. B8852. Skin and skull. Adult male.

Locality. (Canada): Labrador, Strait of Belle Isle, Lance (=Lanse) au Loup. 15 April 1899.

Collector. E. Doane. Original number 7.

Condition. Skin complete. Skull slightly damaged (hole in left parietal).

Type Series. 1 paratype; B3972, skin and skull, adult male.

Comments. *S. b. medioximus* was retained as a valid subspecies by Hall (1981: 834).

Subfamily CRICETINAE Fischer de Waldheim, 1817

Genus *CANSUMYS* G. M. Allen, 1928

Cansumys canus G. M. Allen, 1928
J. Mammal., 9: 245, 9 August.

Holotype. MCZ 23779. Skin and skull. Adult female.
Locality. China: southern Kansu (=Xinjiang), Choni, 9 December 1925.

Collector. R. B. Ekvall. Original number 79.

Condition. Skin complete. Skull partial (left jugal and occiput missing).

Type Series. 1 paratype; MCZ 23780, skin and skull, juvenile male.

Comments. Type species of *Cansumys* G. M. Allen, 1928. Considered a valid species by Musser and Carleton (1993: 537) and Nowak (1999: 1423). Known only by the type series and one additional specimen, FMNH 36067.

Subfamily CRICETOMYINAE Roberts, 1951

Genus *SACCOSTOMUS* Peters, 1846

Saccostomus cricetus G. M. Allen and Lawrence, 1936

Bull. Mus. Comp. Zool., 79: 100, January.
= *Saccostomus mearnsi* Heller, 1910. See Hubert (1978: 51).

Holotype. MCZ 31475. Skin and skull. Subadult male.

Locality. Uganda: Sabei District, due north of Mount Elgon, south bank of Greek River (=Kelim River), 3,000 ft (915 m). 5 December 1933.

Collector. A. Loveridge.

Condition. Skin complete. Skull partial (right tympanic bulla missing). Mandible disarticulated.

Type Series. 1 paratype; MCZ 31474, skin and skull, adult female.

Subfamily DENDROMURINAE G. M. Allen, 1939

Genus *STEATOMYS* Peters, 1846

Steatomys pratensis nyasae Lawrence and Loveridge, 1953

Bull. Mus. Comp. Zool., 110: 39, June.

Holotype. MCZ 44213. Skin and skull. Adult male.

Locality. Nyasaland (=Malawi): foot of Mulanje Mountain, Likabula River, 2,100 ft (641 m). 29 July 1948.

Collector. A. Loveridge.

Condition. Skin and skull complete.

Type Series. 14 paratypes; MCZ 44214–44216, 44218–44228; all represented by skin and skull, 9 males and 5 females.

Comments. Retained as a valid subspecies by Ansell (1978: 77).

Subfamily GERBILLINAE Gray, 1825

Genus *TATERA* Lataste, 1882

Tatera flavipes G. M. Allen, 1914d

Bull. Mus. Comp. Zool., 58: 331, July.
= *Tatera valida kempfi* Wroughton, 1906.
See Bates (1988: 277).

Holotype. MCZ 14491. Skin and skull. Adult female.

Locality. Sudan: Blue Nile, north of (Er) Roseires, Aradeiba. 22 January 1913.

Collector. G. M. Allen and J. C. Phillips. Original number 69.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Tatera soror G. M. Allen, 1914d

Bull. Mus. Comp. Zool., 58: 333, July.
= *Tatera valida kempfi* Wroughton, 1906.
See Bates (1988: 277).

Holotype. MCZ 14492. Skin and skull. Adult female.

Locality. Sudan: Blue Nile, Fazogli. 16 January 1913.

Collector. G. M. Allen and J. C. Phillips. Original number 53.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; MCZ 14493, skin and skull, juvenile male.

Genus *TATERILLUS* Thomas, 1910

Taterillus melanops G. M. Allen, 1912a
Bull. Mus. Comp. Zool., 54: 446, April.
= *Taterillus harringtoni* (Thomas, 1906).
See Musser and Carleton (1993: 563).

Holotype. MCZ 8132. Skin and skull. Male.

Locality. British East Africa (=Kenya): arid plains by the Meru River. 11 August 1909.

Collector. G. M. Allen. Original number 108.

Condition. Skin and skull complete.

Type Series. Holotype only.

Subfamily MURINAE Illiger, 1811

Genus *APODEMUS* Kaup, 1829

Apodemus mystacinus euxinus G. M. Allen, 1915b

Bull. Mus. Comp. Zool., 59: 11, February.
= *Apodemus mystacinus mystacinus* (Danford and Alston, 1877). See Corbet (1978: 133).

Holotype. MCZ 14887. Skin and skull. Male.

Locality. Asia Minor (=Turkey): (Trabzon), near

Trebizond (=Trabzon), Scalita, 1,000 m. 25 November 1905.

Collector: A. Robert. Original number 2189.

Condition. Skin complete. Skull partial (right and left jugal missing, right tympanic bulla separated but present, right and left squamosal missing). Mandible disarticulated.

Type Series. Holotype only.

Genus *DASYMYS* Peters, 1875

Dasymys incomtus alleni Lawrence and Loveridge, 1953

Bull. Mus. Comp. Zool., 110: 53, June.

Holotype. MCZ 26322. Skin and skull. Adult male.

Locality. Tanganyika Territory (=Tanzania): (Mbeya), Iloilo, near Rungwe Mountains, 4,600 ft (1,403 m). 31 March 1930.

Collector: A. Loveridge.

Condition. Skin and skull complete. Mandible disarticulated and right coronoid process chipped.

Type Series. 11 paratypes, all represented by skin and skull, in the MCZ.

Comments. Retained as a valid subspecies by Ansell (1978: 83).

Genus *GRAMMOMYS* Thomas, 1915

Thamnomys ochraceus G. M. Allen, 1912a

Bull. Mus. Comp. Zool., 54: 442, April 1912.

= *Grammomys macmillani* (Wroughton, 1907). See Musser and Carleton (1993: 594).

Holotype. MCZ 8126. Skin and skull. Adult male.

Locality. British East Africa (=Kenya): Meru River, near junction with northern Guaso Nyiro (=Ewaso Nyiro). 8 August 1909.

Collector: G. M. Allen. Original number 103.

Condition. Skin and skull complete.

Type Series. Holotype only.

Genus *HYLOMYSCUS* Thomas, 1926

Hylomyscus alleni simus G. M. Allen and Coolidge, 1930

In Strong, The African Republic of Liberia and the Belgian Congo, 2: 599, October.

= *Hylomyscus alleni* (Waterhouse, 1838). See Heim de Balsac and Aellen (1965: 722).

Holotype. MCZ 24028. Skin and skull. Adult male.

Locality. Liberia: Merikay. 13 September 1926.

Collector: G. M. Allen and H. J. Coolidge, Jr. Original number 97.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a series of paratypes in the MCZ.

Genus *MELOMYS* Thomas, 1922

Melomys levipes stevensi Rümmler, 1935

Z. Säugetierkunde, 10: 109, 31

December.

= *Melomys mollis* Thomas, 1913. See Flannery (1990: 226).

Holotype. MCZ 29890. Skin and skull. Adult male.

Locality. Papua New Guinea: Morobe, Mount Misim (=Missim), 6,700 ft (2,044 m). 17 April 1933.

Collector: H. Stevens.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 11 paratypes; MCZ 29889, 29892–29899, 29901; all represented by skin and skull, 4 females and 7 males.

Melomys moncktoni alleni Rümmler, 1935

Z. Säugetierkunde, 10: 112, 31

December.

= *Melomys rubex alleni* Rümmler, 1935.

See Tate (1951: 299).

Holotype. MCZ 29902. Skin and skull. Adult female.

Locality. Papua New Guinea: Morobe, Mount Misim (=Missim), 6,700 ft (2,044 m). 17 April 1933.

Collector: H. Stevens.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; MCZ 29900, skin and skull, adult male.

Comments. Flannery (1995a: 308–309) did not list subspecies of *M. rubex*, noting, "It is a very variable species, and a taxonomic revision is needed in order to clarify the taxonomic status of many populations."

Genus *MUS* Linnaeus, 1758

Leggada bufo ablutus G. M. Allen and Loveridge, 1942

Bull. Mus. Comp. Zool., 89: 199, February.

= *Mus bufo* (Thomas, 1906). See Musser and Carleton (1993: 622).

Holotype. MCZ 40745. Skin and skull. Adult male.

Locality. Belgian Congo (=Democratic Republic of Congo): Kivu, Lake Kivu, Idjwi Island, Upper Mulinga, 6,500 ft (1,983 m). 24 February 1939.

Collector: A. Loveridge.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 2 paratypes; MCZ 40746, skin and skull (no longer in MCZ); MCZ 40747, skin and skull, female.

Leggada gerbillus G. M. Allen and Loveridge, 1933

Bull. Mus. Comp. Zool., 75: 112, February.

= *Mus tenellus* (Thomas, 1903). See Musser and Carleton (1993: 629).

Holotype. MCZ 26586. Skin and skull. Adult male.

Locality. Tanganyika Territory (=Tanzania): Dodoma, Ugogo, 3,700 ft (1,129 m). 23 December 1929.

Collector. A. Loveridge.

Condition. Skin complete. Skull partial (right jugal missing). Mandible disarticulated and angular process of right ramus chipped.

Type Series. Holotype only.

Mus bactrianus tantillus G. M. Allen, 1927

Amer. Mus. Novitates 270: 9, 31 May.

= *Mus musculus tantillus* G. M. Allen, 1927. See Marshall (1977: 214).

Holotype. MCZ 23476. Skin and skull. Adult female.

Locality. China: Sze-chuan (=Sichuan), Wanhsien (=Wanxian). 14 November 1921.

Collector. W. W. Granger.

Condition. Skin complete. Skull partial (6 fragments). Mandible disarticulated.

Type Series. There is a series of paratypes in the AMNH, and 1 paratype in the MCZ; MCZ 23475 (formerly AMNH 56403), skin and skull, male.

Comments. This specimen was formerly AMNH 56416. The original description lists AMNH 56413 as the holotype, but this specimen is a juvenile, not an adult female, as Allen stated. The collection date and measurements of the holotype in the original description fit MCZ 23476 rather than any other specimens in the type series at the AMNH, which are all immatures (Lawrence 1993: 136).

Genus *MYOMYS* Thomas, 1915

Praomys fumatus oweni Setzer, 1956

Proc. U.S. Nat. Mus., 106: 525, 28 November.

= *Myomys fumatus* (Peters, 1878). See Musser and Carleton (1993: 631).

Holotype. MCZ 45883. Skin and skull. Adult male.

Locality. Anglo-Egyptian Sudan (=Sudan): Equatoria Province, Torit District, Murukurun, 50 miles (80.5 km) east of Torit, 2,000 ft (610 m). 9 May 1950.

Collector. J. S. Owen. Original number 1030.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Genus *NIVIVENTER* Marshall, 1976

Epimys zappeyi G. M. Allen, 1912b

Mem. Mus. Comp. Zool., 40: 225, August.

= *Niviventer confucianus* (Milne-Edwards, 1871). See Musser and Carleton (1993: 633).

Holotype. MCZ 7607. Skin and skull. Adult male.

Locality. China: western Szechwan (=Sichuan), Washan Mountains (=Wu Shan), 9,000 ft (2,745 m). 26 October 1908.

Collector. W. R. Zappey. Original number 305.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Genus *OENOMYS* Thomas, 1904

Oenomys hypoxanthus talangae Setzer, 1956

Proc. U.S. Nat. Mus., 106: 505, 28 November.

Holotype. MCZ 45315. Skin and skull. Adult female.

Locality. Anglo-Egyptian Sudan (=Sudan): Equatoria Province, Inatong Mountains, Talanga Forest, 3,000 ft (915 m). 10 July 1950.

Collector. J. S. Owen. Original number 1338.

Condition. Skin and skull complete.

Type Series. 1 paratype; MCZ 45284, skin and skull, male.

Genus *PRAOMYS* Thomas, 1915

Praomys tullbergi melanotus G. M. Allen and Loveridge, 1933

Bull. Mus. Comp. Zool., 75: 106, February.

= *Praomys delectorum* (Thomas, 1910).

See Musser and Carleton (1993: 642).

Holotype. MCZ 26287. Skin and skull. Adult male.

Locality. Tanganyika Territory (=Tanzania): north-west end of Lake Nyasa, Poroto Mountains, Nyamwanga, 6,400 ft (1,952 m). 21 March 1930.

Collector. A. Loveridge.

Condition. Skin complete. Skull partial (left tympanic bulla missing). Mandible disarticulated.

Type Series. 23 paratypes; MCZ 26259, 26255, 26286, 26288–26293, 26295–26297, 26387–26394, 26411, 26497, 26498; all represented by skin and skull.

Comments. Van der Straeten and Dieterlen (1987: 9) and Van der Straeten and Dudu (1990: 81) treated *melanotus* as a species within the *Praomys delectorum* species complex.

Genus *PSEUDOHYDROMYS* Rümmler, 1934

Pseudohydromys murinus Rümmler, 1934
Z. Säugetierkunde, 9: 48, 30 December.

Holotype. MCZ 29904. Skin and skull. Adult male.
Locality. Papua New Guinea, Morobe, Mount Misim (=Missim), 7,000 ft (2,135 m). 8 March 1933.
Collector. H. Stevens.
Condition. Skin complete, with small bald spots. Skull complete. Mandible disarticulated.
Type Series. Holotype only.
Comments. Type species of *Pseudohydromys* Rümmler, 1934. Considered a valid species by Flannery (1995a: 255), Musser and Carleton (1993: 644), and Nowak (1999: 1612).

Genus *STENOMYS* Thomas, 1910

Stenomys niobe stevensi Rümmler, 1935
Z. Säugetierkunde, 10: 117, 31 December.
= *Stenomys niobe niobe* (Thomas, 1906).
See Flannery (1995a: 339).

Holotype. MCZ 29915. Skin and skull. Adult male.
Locality. Papua New Guinea: Morobe, Mount Misim (=Missim), 7,000 ft (2,135 m). 16 January 1933.
Collector. H. Stevens. Original number 8.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. Holotype only.
Comments. Taylor et al. (1982: 193) first synonymized *stevensi* with *niobe*, under the genus *Rattus*.

Stenomys verecundus mollis Rümmler, 1935
Z. Säugetierkunde, 10: 116, 31 December.

Holotype. MCZ 29905. Skin and skull. Adult female.
Locality. Papua New Guinea: Morobe, Mount Misim (=Missim), 5,850 ft (1,784 m). 14 April 1933.
Collector. H. Stevens.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. Holotype only.
Comments. Retained as a valid subspecies by Flannery (1995a: 346).

Genus *THAMNOMYS* Thomas, 1907

Thamnomys venustus kivuensis G. M. Allen and Loveridge, 1942
Bull. Mus. Comp. Zool., 89: 192, February.

Holotype. MCZ 39151. Skin and skull. Adult female.
Locality. Belgian Congo (=Democratic Republic of Congo): (Sud-Kivu), Lake Kivu, Idjwi Island, Upper Mulinga, 6,500 ft (1,983 m). 2 March 1939.
Collector. A. Loveridge.
Condition. Skin complete. Skull partial (separated between nasal and frontal). Right and left angular processes of mandible chipped.
Type Series. Holotype only.

Subfamily NESOMYINAE Forsyth Major, 1897

Genus *NESOMYS* Peters, 1870

Nesomys lambertoni G. Grandidier, 1930c
Bull. Acad. Malgache, n. ser., 11: 95 (for 1928).

Holotype. MCZ 45941. Skull and postcranial skeleton. Adult male.
Locality. Malagasy Republic (=Madagascar): west coast, vicinity of Maintirano.
Collector. No collection data available. Received by G. Grandidier from Académie Malgache, 1928.
Condition. Skull partial (left zygomatic arch missing, right jugal missing, several small holes). Postcranial skeleton complete (small foot bones presumably preserved in skin).
Type Series. 2 paratypes, MCZ 45933 and 45934, poorly prepared skins (with partial skulls within), both male.
Comments. The skin belonging to the holotype is in the MNHN, Paris (M. Carleton, personal communication). Considered a valid species by Nowak (1999: 1434).

Subfamily OTOMYINAE Thomas, 1897

Genus *OTOMYS* F. Cuvier, 1824

Otomys anchietae lacustris G. M. Allen and Loveridge, 1933
Bull. Mus. Comp. Zool., 75: 120, February.
= *Otomys lacustris* G. M. Allen and Loveridge, 1933. See Dieterlen and Van der Straeten (1992: 385).

Holotype. MCZ 26358. Skin and skull. Adult female.
Locality. Tanganyika Territory (=Tanzania): north end of Lake Nyasa, Ukinga Mountains, Madehani, 7,000 ft (2,135 m). 21 February 1930.

Collector. A. Loveridge.

Condition. Skin complete. Skull partial (left tympanic bulla damaged). Mandible disarticulated and left coronoid process chipped.

Type Series. 17 paratypes; MCZ 26326, 26344–26351, 26353–26357, 26359, 26654, 26658; all represented by skin and skull.

Comments. Included in *O. anchietae* by Musser and Carleton (1993: 680) but treated as a full species by Nowak (1999: 1439).

***Otomys barbouri* Lawrence and Loveridge, 1953**

Bull. Mus. Comp. Zool., 110: 63, June.

Holotype. MCZ 31369. Skin and skull. Adult male.

Locality. Uganda: Mount Elgon, Kaburomi, 1°14'N, 34°31'E, 10,500 ft (3,203 m). 28 December 1933.

Collector. A. Loveridge.

Condition. Skin and skull complete.

Type Series. 9 paratypes; MCZ 31371–31372, 31376, 31421–31425, 31438 (4 males, 4 females, and 1 unsexed individual).

Comments. Considered a valid species by Dieterlen and Van der Straeten (1992: 385) and Nowak (1999: 1439) but included in *O. anchietae* by Musser and Carleton (1993: 680).

***Otomys uzungwensis* Lawrence and Loveridge, 1953**

Bull. Mus. Comp. Zool., 110: 61, June.

= *Otomys typus uzungwensis* Lawrence and Loveridge, 1953. See Hanney (1965: 626).

Holotype. MCZ 26645. Skin and skull. Adult female.

Locality. Tanganyika Territory (=Tanzania): Iringa District, Uzungwa Mountains, Dadaga, 6,000 ft (1,830 m). 31 December 1929.

Collector. A. Loveridge.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. *O. t. uzungwensis* was retained as a valid subspecies by Ansell (1978: 78).

Subfamily SIGMODONTINAE Wagner, 1843

Genus *ISTHMOMYS* Hooper and Musser, 1964

***Megadontomys flavidus* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39: 27, April.

= *Isthmomys flavidus* (Bangs, 1902). See Hooper and Musser (1964: 12).

Holotype. MCZ 10331. Skin and skull. Adult male.

Locality. Panama: Chiriqui, Boquete (=Bajo Boquete), 4,000 ft (1,220 m). 12 April 1901.

Collector. W. W. Brown, Jr. Original number 28.

Condition. Skin complete, with small bald spots. Skull complete. Mandible disarticulated.

Type Series. There is a large series of paratypes in the MCZ.

Comments. Type species of *Isthmomys* Hooper and Musser, 1964. *I. flavidus* was considered a valid species by Musser and Carleton (1993: 706) and Nowak (1999: 1357).

Genus *NECTOMYS* Peters, 1861

Nectomys squamipes amazonicus

Hershkovitz, 1944

Misc. Pub., Mus. Zool., Univ. Mich., 58: 47, 4 January.

Holotype. MCZ 30820. Skin and skull. Male.

Locality. Brazil: (Para), Rio Tapajos, Tauary (=Tauari). 23 January 1934.

Collector. A. M. Olalla. Original number 7312.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Hershkovitz examined 28 specimens, in the MCZ, AMNH, and FMNH.

Comments. Retained as a valid subspecies by Ernest (1986: 1).

Genus *NEOTOMA* Say and Ord, 1825

***Neotoma abbreviata* Goldman, 1909**

Proc. Biol. Soc. Washington, 22: 140, 25 June.

= *Neotoma lepida abbreviata* Goldman, 1909. See Burt (1932: 182).

Holotype. MCZ 12260. Skin and skull. Adult male.

Locality. (Mexico); Lower (=Baja) California, San Francisco Island. 22 February 1909.

Collector. W. W. Brown, Jr. Original number 22.

Condition. Skin and skull complete.

Type Series. 9 paratypes; MCZ 12256–12259, 12261–12265; all represented by skin and skull, 5 females and 4 males. MCZ 12265 is now in the USNM.

Comments. *N. l. abbreviata* was retained as a valid subspecies by Hall (1981: 755).

***Neotoma bella* Bangs, 1899j**

Proc. New England Zool. Club, 1: 66, 31 July.

= *Neotoma lepida lepida* Thomas, 1893. See Goldman (1932: 62).

Holotype. B5308. Skin and skull. Adult male.

Locality. (United States): California, Riverside County, Palm Springs. 12 April 1896.

Collector. E. C. Thurber. Original number 623.

Condition. Skin and skull complete. Mandible disarticulated and left angular process chipped.

Type Series. Holotype only.

Neotoma distincta Bangs, 1903a
Proc. Biol. Soc. Washington, 16: 89, 25
June.
= *Neotoma mexicana distincta* Bangs,
1903. See Hall (1955: 329).

Holotype. B9819. Skin and skull. Adult male.
Locality. Mexico: Vera Cruz, near Jalapa, Texolo. 8
March 1899.
Collector. S. N. Rhoads. Original number 295.
Condition. Skin and skull complete.
Type Series. 4 paratypes: B9818, skin and skull,
male, B9820, skin and skull, female; B9821, skin
and skull, male (exchanged to USNM); B9822, skin
and skull, male.
Comments. *N. m. distincta* was retained as a valid
subspecies by Hall (1981: 761) and Cornely and
Baker (1986: 1).

Neotoma floridana rubida Bangs, 1898b
Proc. Boston Soc. Nat. Hist., 28: 185, 15
March.

Holotype. B2872. Skin and skull. Adult male.
Locality. (United States): Louisiana, Terrebonne
Parish, Gibson. 4 April 1895.
Collector. F. L. Small. Original number 1751.
Condition. Skin and skull complete. Mandible dis-
articulated.
Type Series. 2 specimens are mentioned by num-
ber in the original description: B2871, skin and
skull, adult male, and B2873, skin and skull, adult
female.
Comments. Retained as a valid subspecies by Hall
(1981: 749).

Genus *NYCTOMYS* de Saussure, 1860

Nyctomys nitellinus Bangs, 1902b
Bull. Mus. Comp. Zool., 39: 30, April.
= *Nyctomys sumichrasti nitellinus* Bangs,
1902. See Goldman (1916: 155).

Holotype. MCZ 10249. Skin and skull. Adult female.
Locality. Panama: Chiriqui, Boquete (=Bajo Bo-
quete), 4,000 ft (1,220 m). 8 February 1901.
Collector. W. W. Brown, Jr. Original number 119.
Condition. Skin and skull complete.
Type Series. 5 paratypes; MCZ 10245, skin and
skull, adult male; MCZ 10246, skin and skull, adult
male; MCZ 10247, adult female, skin and skull;
MCZ 10248, skin and skull, adult female; MCZ
10250, skin and skull, juvenile female.
Comments. *N. s. nitellinus* was retained as a valid
subspecies by Hall (1981: 630).

Genus *OECOMYS* Thomas, 1906

Oecomys trabeatus G. M. Allen and
Barbour, 1923
Bull. Mus. Comp. Zool., 65: 262,
February.
= *Oecomys bicolor trabeatus* G. M. Allen
and Barbour, 1923. See comments.

Holotype. MCZ 19837. Skin and skull. Male.
Locality. Panama: Rio Jesusito. 10 April 1922.
Collector. T. Barbour and W. S. Brooks. Original
number 2027.
Condition. Skin complete. Skull partial (right zy-
gomatic arch broken). Mandible disarticulated.
Type Series. Holotype only.
Comments. Following Hershkovitz (1960: 533), *O.*
b. trabeatus was retained as a valid subspecies by
Hall (1981: 619) under the genus *Oryzomys*. The
use of *Oecomys* as a generic name follows Musser
and Carleton (1993: 715).

Oryzomys flavicans illectus Bangs, 1898k
Proc. Biol. Soc. Washington, 12: 164, 10
August.
= *Oecomys flavicans illectus* (Bangs,
1898k). See comments.

Holotype. B8101. Skin and skull. Adult female.
Locality. Colombia: Magdalena, Santa Marta
Mountains, Pueblo Viejo, 8,000 ft (2,440 m). 24
March 1898.
Collector. W. W. Brown, Jr. Original number 89.
Condition. Skin complete. Skull partial (right jugal
missing).
Type Series. There is a small series of paratypes in
the MCZ.
Comments. The use of *Oecomys* as a generic name
follows Musser and Carleton (1993: 715).

Genus *OLIGORYZOMYS* Bangs, 1900

Oryzomys navus Bangs, 1899a
Proc. Biol. Soc. Washington, 13: 9, 31
January.
= *Oligoryzomys fulvescens* (Saussure,
1860). See Carleton and Musser (1989:
70).

Holotype. B8107. Skin and skull. Adult male.
Locality. Colombia: Magdalena, Santa Marta
Mountains, Pueblo Viejo, 8,000 ft (2,440 m). 26
March 1898.
Collector. W. W. Brown, Jr. Original number 154.
Condition. Skin and skull complete. Mandible dis-
articulated.
Type Series. 9 paratypes; B8223–B8231; all repre-
sented by skin and skull, except B8228 (skin only);
2 females and 7 males. B8224 is now in the USNM.

and B8223, B8226, B8230, and B8231 are now in the AMNH.

Comments. *Oryzomys navus* is the type species of *Oligoryzomys* Bangs, 1899.

***Oryzomys (Oligoryzomys) vegetus* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39: 35, April.
= *Oligoryzomys vegetus* (Bangs, 1902).
See Musser and Carleton (1993: 718).

Holotype. MCZ 10298. Skin and skull. Adult female.

Locality. Panama: Chiriqui, Volcan de Chiriqui, Boquete, 4,000 ft (1,220 m). 16 April 1901.

Collector. W. W. Brown, Jr. Original number 304.

Condition. Skin complete. Skull partial (left jugal missing). Mandible disarticulated.

Type Series. 12 paratypes; MCZ 10295 (now in USNM), 10297, 10300–10306, 10308–10310, 2 females and 10 males, all represented by skin and skull except for 10308 (skin only).

Comments. Considered a valid species by Musser and Carleton (1993: 718) and Nowak (1999: 1368). Carleton and Musser (1995) provided distributional information and support of specific status for *O. vegetus*.

Genus *ORYZOMYS* Baird, 1858

***Oryzomys devius* Bangs, 1902b**

Bull. Mus. Comp. Zool., 39: 34, April.

Holotype. MCZ 10324. Skin and skull. Adult female.

Locality. Panama: Chiriqui, Volcan de Chiriqui, Boquete (= Bajo Boquete), 5,000 ft (1,525 m). 29 January 1901.

Collector. W. W. Brown, Jr. Original number 73.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; MCZ 10325, skin and skull, adult female; MCZ 10326, skin and skull, adult female; MCZ 10340, skin and skull, adult male.

Comments. Considered a valid species by Musser and Carleton (1993: 722) and Nowak (1999: 1366).

***Oryzomys palustris coloratus* Bangs, 1898b**

Proc. Boston Soc. Nat. Hist., 28: 189, 15 March.

= *Oryzomys palustris natator* Chapman, 1893. See Wolfe (1982: 1).

Holotype. B4470. Skin and skull. Adult male.

Locality. (United States): Florida, Monroe County, Cape Sable. 17 April 1895.

Collector. C. L. Brownell. Original number 148.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

***Oryzomys rostratus carrorum* Lawrence, 1947b**

Proc. New England Zool. Club, 24: 101, 29 May.

Holotype. MCZ 41280. Skin, skull, and postcranial skeleton. Adult male.

Locality. Mexico: Tamaulipas, Rio Soto la Marina, Rancho Santa Ana, 8 miles (12.9 km) southwest of Padilla. 21 December 1941.

Collector. G. H. Pournelle, Third University of Florida Mexican Expedition. Original number 196.

Condition. Skin and skull complete. Mandible disarticulated. Postcranial skeleton partial (right forelimb, hindlimbs, pelvis, ribs, vertebral column).

Type Series. 2 paratypes; MCZ 41281, skin, skull, and postcranial skeleton, female; MCZ 41282, skin, skull, and postcranial skeleton, male.

Comments. Retained as *Oryzomys melanotis carrorum* by Hall (1981: 614). Musser and Carleton (1993: 724) regarded *O. rostratus* as distinct from *O. melanotis*.

Genus *PEROMYSCUS* Gloger, 1841

***Hesperomys gossypinus* LeConte, 1853**

Proc. Acad. Nat. Sci. Philadelphia, 6: 411, 25 October.

= *Peromyscus gossypinus gossypinus* (LeConte, 1853). See Rhoads (1896b: 189).

Lectotype. MCZ 5275. Skin and skull. Adult male.

Locality. (United States): Georgia, Liberty County, Riceboro, probably on the LeConte Plantation near Riceboro. 13 September 1847.

Collector. J. E. LeConte. Formerly USNM 546.

Condition. Skin complete. Skull partial (basioccipital and tympanic bullae broken). Mandible disarticulated.

Type Series. Poole and Schantz (1942: 320) listed potential "cotypes," meaning syntypes. Osgood (1909: 136) mentioned that a specimen, number 752 in the collection of the Academy of Natural Sciences in Philadelphia, possibly possessed type status, but this specimen was not mentioned by Koopman (1976).

Comments. In the original description of *gossypinus*, measurements were given for a single specimen only; however, in addition to this specimen, LeConte made reference to the coloration of "younger individuals." The measurements given correspond to MCZ 5275 rather than to any other of LeConte's specimens still in the USNM (see G. M. Allen, 1931: 262; Poole and Schantz, 1942: 320). In addition, MCZ 5275 was the only specimen of *Peromyscus gossypinus* from Georgia mentioned in Baird's Mammals of North America (1858: 469). Because LeConte did not specify a holotype, MCZ 5275, which seems to be the speci-

men discussed and described by measurement in the original publication and the only adult specimen mentioned, is here designated as lectotype. *P. gossypinus* was considered a valid species by Musser and Carleton (1993: 730) and Nowak (1999: 1361).

Hesperomys leucopus arcticus Mearns, 1890

Bull. Amer. Mus. Nat. Hist., 2: 285, 21 February.

Name preoccupied by *Hesperomys arcticus* Coues, 1877

Peromyscus maniculatus borealis Mearns, 1911

Proc. Biol. Soc. Washington, 24: 102, 15 May. (Replacement name for

Hesperomys leucopus arcticus Mearns, 1890)

Holotype. MCZ 5555. Skin and skull. Adult male.

Locality. Canada: Northwest Territories, MacKenzie, Fort Simpson. 7 September 1859.

Collector. R. Kennicott. Original number 157. Formerly USNM 4531.

Condition. Skin complete. Skull partial (left jugal and process of squamosal missing, right process of squamosal missing, basioccipital and palatine missing). Mandible disarticulated and both angular process missing.

Type Series. Holotype only.

Comments. *P. m. borealis* was retained as a valid subspecies by Hall (1981: 672).

Hesperomys sonoriensis nebrascensis Coues, 1877

In Coues and J. A. Allen, Monographs N. Amer. Rodentia, U.S. Geol. Geogr.

Survey Terr. Rep. Washington, 11: 79, August.

= *Peromyscus maniculatus nebrascensis* (Coues, 1877). See Osgood (1909: 75).

Syntype. MCZ 5528. Skin and skull.

Locality. Nebraska (now Wyoming): (Converse County), Deer Creek. 19 January 1860.

Collector. F. V. Hayden. Original no. 80. Formerly USNM 4310.

Condition. Skin complete. Skull partial (posterior missing from parietal to palatine; both jugal and process of squamosal broken). Left angular process of mandible chipped, right side broken at cheek teeth.

Type Series. 1 other syntype, present location unknown, formerly in the USNM.

Comments. *Hesperomys sonoriensis nebrascensis*

Baird, 1858 is a *nomen nudum*. Osgood (1909: 78) and Mearns (1911: 102) designated Deer Creek, Nebraska, as the type locality. Jones (1958: 107–111) reviewed the systematic history of *nebrascensis*, and Jones and Mursaloglu (1961: 101–103) reported the discovery of one of the two original syntypes in the MCZ. The location of the other syntype, if it still exists, is unknown.

Peromyscus anastasae Bangs, 1898b

Proc. Boston Soc. Nat. Hist., 28: 195, 15 March.

= *Peromyscus gossypinus anastasae* Bangs, 1898. See Osgood (1909: 141).

Holotype. B7179. Skin and skull. Adult female.

Locality. (United States): Florida, St. Johns County, Anastasia Island, Point Romo. 15 February 1897.

Collector. O. Bangs. Original number 2.

Condition. Skin complete, skull partial (premaxilla to frontal in fragments). Right mandible missing, left present.

Type Series. There is a small series of paratypes in the MCZ.

Comments. *P. g. anastasae* was retained as a valid subspecies by Hall (1981: 689).

Peromyscus bellus Bangs, 1896h

Proc. Biol. Soc. Washington, 10: 137, 28 December.

= *Peromyscus attwateri* J. A. Allen, 1895. See Schmidly (1973: 125).

Holotype. B5483. Skin and skull. Adult male.

Locality. (United States): Indian Territory (=Oklahoma), (Adair County), Stilwell. 15 August 1896.

Collector. T. Surber. Original number 67.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; B5484, skin and skull, adult female.

Peromyscus cacabatus Bangs, 1902b

Bull. Mus. Comp. Zool., 39: 29, April.

= *Peromyscus mexicanus* (Saussure, 1860). See Huckaby (1980: 15).

Holotype. MCZ 10225. Skin and skull. Adult female.

Locality. Panama: Chiriqui, Boquete (=Bajo Boquete), 5,000 ft (1,525 m). 22 April 1901.

Collector. W. W. Brown, Jr. Original number 331.

Condition. Skin complete. Skull partial (left jugal missing). Mandible disarticulated.

Type Series. There is a very large series of paratypes in the MCZ.

***Peromyscus canadensis abietorum* Bangs, 1896d**

Proc. Biol. Soc. Washington, 10: 49, 9 March.

= *Peromyscus maniculatus abietorum* Bangs, 1896. See Osgood (1909: 45).

Holotype. B2205. Skin and skull. Adult female.

Locality. (Canada): Nova Scotia, James River. 8 August 1894.

Collector. C. H. Goldthwaite.

Condition. Skin complete. Skull partial (right jugal missing).

Type Series. There is a series of paratypes in the MCZ.

Comments. *P. m. abietorum* was retained as a valid subspecies by Hall (1981: 670).

***Peromyscus canadensis argentatus* Copeland and Church, 1906**

Proc. Biol. Soc. Washington, 19: 122, 6 September.

= *Peromyscus maniculatus argentatus* Copeland and Church, 1906. See Osgood (1909: 46).

Holotype. MCZ 54627. Skin and skull. Adult male.

Locality. (Canada): New Brunswick, Grand Manan Island, Grand Harbor. 19 September 1905.

Collector. M. L. Church and M. Copeland. Original number 168.

Condition. Skin and skull complete.

Type Series. There is a large series of paratypes in the MCZ.

Comments. *P. m. argentatus* was retained as a valid subspecies by Hall (1981: 671).

***Peromyscus crinitus scitulus* Bangs, 1899j**

Proc. New England Zool. Club, 1: 67, 31 July.

= *Peromyscus crinitus crinitus* (Merriam, 1891). See Osgood (1909: 229).

Holotype. B9175. Skin and skull. Adult male.

Locality. (United States): Nevada, Douglas County, Gardnerville. 13 July 1898.

Collector. W. W. Price and P. O. Simons. Original number 1571.

Condition. Skin complete. Skull partial (right and left jugal missing).

Type Series. 7 paratypes; B9177–B9180, B9183–B9185; all represented by skin and skull, 4 females and 3 males.

***Peromyscus gossypinus nigriculus* Bangs, 1896e**

Proc. Biol. Soc. Washington, 10: 124, 5 November.

= *Peromyscus gossypinus gossypinus* (LeConte, 1853). See Osgood (1909: 136).

Holotype. B2731. Skin and skull. Adult female.

Locality. (United States): Louisiana, Plaquemines Parish, Burbridge. 30 January 1895.

Collector. F. L. Small. Original number 1547/156.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a very large series of paratypes in the MCZ.

***Peromyscus gossypinus palmarius* Bangs, 1896e**

Proc. Biol. Soc. Washington, 10: 124, 5 November.

Holotype. B3224. Skin and skull. Adult female.

Locality. (United States): Florida, Brevard County, Oak Lodge on East Peninsula opposite Micco. 23 February 1895.

Collector. O. Bangs.

Condition. Skin and skull complete.

Type Series. There is a very large series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 690).

***Peromyscus insulanus* Bangs, 1898b**

Proc. Boston Soc. Nat. Hist., 28: 196, 15 March.

= *Peromyscus gossypinus anastasae* Bangs, 1898. See Osgood (1909: 141).

Holotype. B6438. Skin and skull. Adult male.

Locality. (United States): Georgia, Camden County, Cumberland Island, north end. 10 April 1897.

Collector. W. W. Brown, Jr. Original number 804.

Condition. Skin complete. Skull partial (right jugal missing).

Type Series. There is a large series of paratypes in the MCZ.

***Peromyscus leucopus ammodytes* Bangs, 1905a**

Proc. New England Zool. Club, 4: 14, 28 February.

Holotype. B828. Skin and skull. Adult male.

Locality. (United States): Massachusetts, Barnstable County, Monomoy Island. 28 December 1893.

Collector. G. S. Miller, Jr. and O. Bangs. Original number 8.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 685).

Peromyscus leucopus fusus Bangs, 1905a
Proc. New England Zool. Club, 4: 13, 28
February.

Holotype. B9737. Skin and skull. Adult male.

Locality. (United States): Massachusetts, Dukes County, Martha's Vineyard, W. Tisbury. 17 June 1899.

Collector. O. Bangs. Original number 1.

Condition. Skin and skull complete.

Type Series. There is a small series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 686).

Peromyscus oreas Bangs, 1898f
Proc. Biol. Soc. Washington, 12: 84, 24
March.

Holotype. B3696. Skin and skull. Adult female.

Locality. Canada: British Columbia, near boundary of Whatcom County, Washington, 49th parallel, Mount Baker Range, 6,500 ft (1,983 m). 29 August 1896.

Collector. A. C. Brooks. Original number 745.

Condition. Skin and skull complete.

Type Series. There is a large series of paratypes in the MCZ.

Comments. Considered a valid species by Musser and Carleton (1993: 734) and Nowak (1999: 1361).

Peromyscus phasma Bangs, 1898b
Proc. Boston Soc. Nat. Hist., 28: 199, 15
March.

= *Peromyscus polionotus phasma* Bangs,
1898. See Osgood (1909: 107).

Holotype. B7175. Skin and skull. Adult female.

Locality. (United States): Florida, St. Johns County, Anastasia Island, Point Romo. 14 February 1897.

Collector. O. Bangs. Original number 3.

Condition. Skin complete. Skull partial (parietal, tympanic bulla, left jugal, and process of squamosal broken). Mandible disarticulated.

Type Series. There is a series of paratypes in the MCZ.

Comments. *P. p. phasma* was retained as a valid subspecies by Hall (1981: 668).

Peromyscus subgriseus arenarius Bangs,
1898b

Proc. Boston Soc. Nat. Hist., 28: 202,
March.

Name preoccupied by *Peromyscus
eremicus arenarius* Mearns, 1896.

Peromyscus subgriseus baliolus Bangs,
1898n

Science, n. ser., 8: 215, 19 August.
(Replacement name for *Peromyscus
subgriseus arenarius* Bangs, 1898)

= *Peromyscus polionotus polionotus*
(Wagner, 1843). See Osgood (1909: 104).

Holotype. B5925. Skin and skull. Adult male.

Locality. (United States): Georgia, Scriven County, Hursman's Lake (Savannah River), near Bascom. 15 December 1896.

Collector. W. W. Brown, Jr. Original number 60.

Condition. Skin and skull complete.

Type Series. There is a large series of paratypes in the MCZ.

Peromyscus subgriseus rhoadsi Bangs,
1898b

Proc. Boston Soc. Nat. Hist., 28: 201, 15
March.

= *Peromyscus polionotus rhoadsi* Bangs,
1898. See Osgood (1909: 107).

Holotype. B6980. Skin and skull. Adult male.

Locality. (United States): Florida, Hillsborough County, head of Anclote River. 23 May 1895.

Collector. W. S. Dickinson.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. *P. p. rhoadsi* was retained as a valid subspecies by Hall (1981: 669).

Peromyscus texanus saturatus Bangs,
1897a

Amer. Nat. 31: 75, 1 January.

= *Peromyscus maniculatus saturatus*
Bangs, 1897. See Osgood (1909: 61).

Holotype. B2581. Skin and skull. Adult male.

Locality. Canada: British Columbia, Saturna Island. 31 January 1894.

Collector. W. C. Colt. Original number 12S.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. *P. m. saturatus* was retained as a valid subspecies by Hall (1981: 682).

Genus *REITHRODONTOMYS* Giglioli, 1873

Reithrodontomys australis vulcanius Bangs, 1902b

Bull. Mus. Comp. Zool., 39: 38, April.
= *Reithrodontomys sumichrasti vulcanius* Bangs, 1902. See Hooper (1952: 83).

Holotype. MCZ 10281. Skin and skull. Adult male.
Locality. Panama: Chiriqui, Volcan de Chiriqui, 10,300 ft (3,142 m). 26 May 1901.
Collector. W. W. Brown, Jr. Original number 500.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. Holotype only.
Comments. *R. s. vulcanius* was retained as a valid subspecies by Hall (1981: 644).

Reithrodontomys creper Bangs, 1902b

Bull. Mus. Comp. Zool., 39: 39, April.
Holotype. MCZ 10284. Skin and skull. Adult female.
Locality. Panama: Chiriqui, Volcan de Chiriqui, 11,000 ft (3,355 m). 2 June 1901.
Collector. W. W. Brown. Original number 504.
Condition. Skin and skull complete. Mandible disarticulated. Left lower incisor missing.
Type Series. Holotype only.
Comments. Considered a valid species by Musser and Carleton (1993: 740) and Nowak (1999: 1364).

Reithrodontomys leontii impiger Bangs, 1898m

Proc. Biol. Soc. Washington, 12: 167, 10 August.
= *Reithrodontomys humulis humulis* (Audubon and Bachman, 1841). See Hall and Kelson (1959: 584).

Holotype. B7784. Skin and skull. Adult male.
Locality. (United States): West Virginia, Greenbriar County, White Sulphur Springs, 2,000 ft (610 m). 27 February 1898.
Collector. T. Surber. Original number 466.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. 2 paratypes; B6931 (not B6932, as stated in the original description), skin and skull, adult male; B7785, skin and skull, adult female.

Genus *SCOTINOMYS* Thomas, 1913

Akodon teguina apricus Bangs, 1902b
Bull. Mus. Comp. Zool., 39: 40, April.
= *Scotinomys teguina apricus* (Bangs, 1902). See Thomas (1913: 409).

Holotype. MCZ 10236. Skin and skull. Adult female.
Locality. Panama: Chiriqui, Boquete (=Bajo Boquete), 4,000 ft (1,220 m). 24 February 1901.

Collector. W. W. Brown, Jr. Original number 192.
Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 4 paratypes; MCZ 10234, skin and skull, adult male; MCZ 10235, skin, adult female; MCZ 10237, skin and skull, adult female; MCZ 10238, skin and skull, adult female.
Comments. *S. t. apricus* was retained as a valid subspecies by Hooper (1972: 21) and Hall (1981: 734).

Akodon xerampelinus Bangs, 1902b
Bull. Mus. Comp. Zool., 39: 41, April.
= *Scotinomys xerampelinus* (Bangs, 1902). See Thomas (1913: 409).

Holotype. MCZ 10240. Skin and skull. Adult male.
Locality. Panama: Chiriqui, Volcan de Chiriqui, 10,300 ft (3,142 m). 26 May 1901.
Collector. W. W. Brown, Jr. Original number 501.
Condition. Skin complete. Skull partial (right jugal missing). Mandible disarticulated.
Type Series. 2 paratypes; MCZ 10239, skin and skull, adult male; MCZ 10241, skin and skull, adult male.
Comments. *S. xerampelinus* was considered a valid species by Musser and Carleton (1993: 746) and Nowak (1999: 1355).

Genus *SIGMODON* Say and Ord, 1825

Sigmodon austerulus Bangs, 1902b
Bull. Mus. Comp. Zool., 39: 32, April.
= *Sigmodon hispidus borucae* J. A. Allen, 1897. See Hall and Kelson (1959: 672).

Holotype. MCZ 10288. Skin and skull. Adult male.
Locality. Panama: Chiriqui, Volcan de Chiriqui, 10,000 ft (3,050 m). 1 June 1901.
Collector. W. W. Brown, Jr. Original number 503.
Condition. Skin complete. Skull partial—according to original description, “unfortunately it [the skull] was broken by the trap directly across the orbits.”
Type Series. Holotype only.
Comments. For comments regarding the type locality, see Enders (1953a: 508–509), who suggested that a native helper of W. W. Brown, Jr., transplanted a specimen of *S. [lu.] borucae*, trapped during a trip to his home in the lowlands near Boruca, to the top of the Volcan, “after Brown had promised a bottle of wine to any man who captured a *Sigmodon* at that altitude.”

Sigmodon hispidus exsputus G. M. Allen, 1920b
J. Mammal., 1: 236, 4 December.

Holotype. MCZ 18100. Skin and skull. Adult male.
Locality. (United States): Florida, Monroe County, Big Pine Key. 16 April 1920.
Collector. W. S. Brooks. Original number 1936.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; MCZ 18101, skin and skull, adult male.

Comments. Retained as a valid subspecies by Hall (1981: 737).

Sigmodon hispidus furvus Bangs, 1903b
Bull. Mus. Comp. Zool., 39: 158, July.

Holotype. MCZ 10665. Skin and skull. Male.

Locality. Honduras: Atlantida, La Ceiba. 16 January 1902.

Collector. W. W. Brown, Jr. Original number 4.

Condition. Skin and skull complete.

Type Series. Holotype only.

Comments. Retained as a valid subspecies by Hall (1981: 738). *Sigmodon hispidus fervidus* Lydekker, 1904 (p. 34) was a misspelling and thus accidental renaming of *Sigmodon hispidus furvus* Bangs, 1903.

Sigmodon hispidus spadicipygus Bangs, 1898b

Proc. Boston Soc. Nat. Hist., 28: 192, 15 March.

Holotype. B4477. Skin and skull. Adult female.

Locality. (United States): Florida, Monroe County, Cape Sable. 18 April 1895.

Collector. C. L. Brownell. Original number 153.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 739).

Sigmodon sanctae-martae Bangs, 1898q

Proc. Biol. Soc. Washington, 12: 189, 30 December.

= *Sigmodon hispidus hirsutus* (Burmeister, 1854). See Cabrera (1961: 508).

Holotype. BS105. Skin and skull. Adult male.

Locality. Colombia: (Magdalena), (Santa Marta Mountains), Pueblo Viejo (not far from the source of Rio Ancho), 8,000 ft (2,440 m). 23 March 1898.

Collector. W. W. Brown, Jr. Original number 73.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; BS250, skin and skull, adult male.

Genus *THOMASOMYS* Coues, 1884

Oryzomys (Erioryzomys) monochromos Bangs, 1900b

Proc. New England Zool. Club, 1: 97, 23 February.

= *Thomasomys monochromos* (Bangs, 1900). See Gardner and Patton (1976: 26).

Holotype. BS348. Skin and skull. Adult male.

Locality. Colombia: Magdalena, Santa Marta Mountains, Paramo de Macotama, 11,000 ft (3,355 m). 7 March 1899.

Collector. W. W. Brown, Jr. Original number 93.

Condition. Skin complete. Skull partial (right jugal missing). Mandible disarticulated.

Type Series. 4 paratypes; BS248, juvenile male, BS345, adult female, BS346, adult female, BS347, adult male; all represented by skin and skull.

Comments. Considered a valid species by Musser and Carleton (1993: 750) and Nowak (1999: 1362). Paramo de Macotama is in La Guajira (Paynter 1997: 261).

Genus *ZYGODONTOMYS* J. A. Allen, 1897

Zygodontomys seorsus Bangs, 1901b

Amer. Nat., 35: 642, 22 August.

= *Zygodontomys brevicauda cherriei* (J. A. Allen, 1895). See Voss (1991: 59).

Holotype. BS490. Skin and skull. Adult male.

Locality. Panama: Gulf of Panama, San Miguel Island, Isla del Rey. 5 May 1900.

Collector. W. W. Brown, Jr. Original number 147.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Bangs based the description on a series of 68 specimens, most of which are still in the MCZ.

Family PEDETIDAE Gray, 1825

Genus *PEDETES* Illiger, 1811

Pedetes cafer taborae G. M. Allen and Loveridge, 1927

Proc. Boston Soc. Nat. Hist., 38: 438, 23 December.

= *Pedetes capensis* (Forster, 1778). See Misonne (1974: 8).

Holotype. MCZ 23080. Skin and skull. Adult female.

Locality. Tanganyika Territory (=Tanzania): Tabora, Unyamwezi, 4,000 ft (1,220 m). 18 November 1921.

Collector. A. Loveridge. Original number R6915.

Condition. Skin complete, with small bald spots on dorsum. Skull complete.

Type Series. Holotype only.

Family MYOXIDAE Gray, 1821

Genus *GRAPHIURUS* Smuts, 1832

Aethoglis hueti argenteus G. M. Allen, 1936

J. Mammal., 17: 293, 14 August.

= *Graphiurus hueti argenteus* (G. M. Allen, 1936). See Hayman and Holt (1940: 608).

Holotype. MCZ 17920. Skin and skull. Adult female.

Locality. Cameroons (=Cameroon): (Kribi), Lolodorf, 17 March 1911.

Collector. G. Schwab. Original number 1.

Condition. Skin and skull complete.

Type Series. 2 paratypes; MCZ 17607, skin and skull, adult female; and a specimen in the USNM, number 125434.

Comments. Rosevear considered *G. h. argenteus* "possibly valid as a race" (1969: 501).

Claviglis soleatus collaris G. M. Allen and Loveridge, 1933

Bull. Mus. Comp. Zool., 75: 122,

February.

= *Graphiurus lorraineus* Dollman, 1910.

See Holden (1993: 764).

Holotype. MCZ 26373. Skin and skull. Adult female.

Locality. Tanganyika Territory (=Tanzania): (Iringa), north end Lake Nyasa, Ukinga Mountains, Madhani, 7,000 ft (2,135 m). 24 February 1930.

Collector. A. Loveridge.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 2 paratypes; MCZ 26374, skin and skull, male; MCZ 26375, skin and skull, female.

Graphiurus microtis griseus G. M. Allen, 1912a

Bull. Mus. Comp. Zool., 54: 440, April.

= *Graphiurus murinus griseus* G. M. Allen, 1912. See Hayman and Holt (1940: 610).

Holotype. MCZ 8244. Skin and skull. Adult male.

Locality. British East Africa (=Kenya): northern Guaso Nyiro River (=Ewaso Ngiro), 4,000 ft (1,220 m). 25 July 1909.

Collector. G. M. Allen. Original number 51.

Condition. Skin and skull complete.

Type Series. 2 paratypes; MCZ 8248, skin and skull, male; MCZ 8249, skin and skull, adult female.

Graphiurus schwabi G. M. Allen, 1912a
Bull. Mus. Comp. Zool., 54: 441, April.
= *Graphiurus surdus* Dollman, 1912. See Holden (1993: 765).

Holotype. MCZ 8607. Skin and skull. Juvenile.

Locality. Cameroun (=Cameroon), Kribi. 1911.

Collector. G. Schwab.

Condition. Skin and skull complete.

Type Series. Holotype only.

Family BATHYERGIDAE Waterhouse, 1841

Genus *CRYPTOMYS* Gray, 1864

Cryptomys hottentotus oclusus G. M. Allen and Loveridge, 1933

Bull. Mus. Comp. Zool., 75: 125, February.

= *Cryptomys hottentotus whytei* (Thomas, 1897). See Honeycutt et al. (1991: 51).

Holotype. MCZ 26557. Skin and skull. Adult male.

Locality. Tanganyika Territory (=Tanzania): (Iringa), Ungungve Mountains, Kigogo, 6,000 ft (1,830 m). 18 January 1930.

Collector. A. Loveridge.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 15 paratypes; MCZ 26558–26572, all represented by skin and skull.

Genus *HETEROCEPHALUS* Rüppell, 1842

Heterocephalus stygius G. M. Allen, 1912a

Bull. Mus. Comp. Zool., 54: 444, April.

= *Heterocephalus glaber* Rüppell, 1842. See Hollister (1919: 160).

Holotype. MCZ 12470. Body in alcohol, skull extracted. Adult female.

Locality. British East Africa (=Kenya): northern Guaso Nyiro River (=Ewaso Ngiro), Neumann's Boma. 6 August 1909.

Collector. G. M. Allen.

Condition. Alcoholic. Skull complete. Mandible disarticulated.

Type Series. Holotype only.

Family ERITHIZONTIDAE Bonaparte,
1845

Genus *ERITHIZON* F. Cuvier, 1822

Erethizon dorsatus picinus Bangs, 1900c
Proc. New England Zool. Club, 2: 37, 20
September.
= *Erithizon dorsatum dorsatum* (Linnaeus,
1758). See Harper (1961: 90).

Holotype. B8839. Skin and skull. Adult male.
Locality. (Canada): Labrador, Strait of Belle Isle,
Lance (=Lanse) au Loup. 16 February 1899.
Collector. E. Doane.
Condition. Skin and skull complete.
Type Series. 15 paratypes: B8832–B8838, B8840–
B8847; all represented by skin and skull, 8 females
and 7 males. Bangs had also a skull of *picinus*
(B8831) from Black Bay, Labrador, at the time of
description, not mentioned in the original publi-
cation.

Family DASYPROCTIDAE Gray, 1825

Genus *DASYPROCTA* Illiger, 1811

Dasyprocta callida Bangs, 1901b
Amer. Nat., 35: 635, 22 August.
= *Dasyprocta punctata callida* Bangs,
1901. See Kellogg (1946: 59).

Holotype. B8443. Skin and skull. Adult male.
Locality. Panama: (Panama), San Miguel Island. 8
May 1900.
Collector. W. W. Brown, Jr. Original number 171.
Condition. Skin and skull complete.
Type Series. 5 paratypes; B8442, B8444–B8447; all
represented by skin and skull, 3 females and 2
males.
Comments. *D. p. callida* was retained as a valid
subspecies by Hall (1981: 860).

Dasyprocta colombiana Bangs, 1898k
Proc. Biol. Soc. Washington, 12: 163, 10
August.
= *Dasyprocta punctata colombiana* (Gray,
1898). See Cabrera (1961: 589).

Holotype. B8008. Skin and skull. Adult female.
Locality. Colombia: Magdalena, Santa Marta. 6
January 1898.
Collector. W. W. Brown, Jr. Original number 37.
Condition. Skin and skull complete.
Type Series. 1 paratype; B8113, skin and skull, ju-
venile male.
Comments. *D. p. colombiana* was retained as a val-
id subspecies by Cabrera (1961: 589).

Dasyprocta noblei G. M. Allen, 1914e
Proc. New England Zool. Club, 5: 69, 7
October.

= *Dasyprocta leporina noblei* G. M. Allen,
1914. See Woods (1993: 781).

Holotype. MCZ 15936. Skin and skull (and atlas).
Adult female.
Locality. Guadeloupe Island: Goyave. 22 August
1914.
Collector. G. K. Noble.
Condition. Skin complete. Skull partial (bone miss-
ing from nasal and frontal).
Type Series. 1 paratype; MCZ 15937, skin and
skull, subadult female.

Dasyprocta punctata nuchalis Goldman,
1917
Proc. Biol. Soc. Washington, 30: 113, 23
May.

Holotype. MCZ 10081. Skin and skull. Adult female.
Locality. Panama: Chiriqui, Divala. 30 November
1900.
Collector. W. W. Brown, Jr. Original number 17.
Condition. Skin and skull complete.
Type Series. 4 paratypes; MCZ 10080, skin and
skull, adult male; 10084, skull; 10175, skin and
skull, adult female; 10176, skin and skull, adult
male.
Comments. Retained as a valid subspecies by Hall
(1981: 860).

Family AGOUTIDAE Gray, 1821

Genus *AGOUTI* Lacépède, 1799

Agouti paca virgatus Bangs, 1902b
Bull. Mus. Comp. Zool., 39: 47, April.

Holotype. MCZ 10079. Skin and skull. Adult male.
Locality. Panama: Chiriqui, Divala. 16 December
1900.
Collector. W. W. Brown, Jr. Original number 21.
Condition. Skin and skull complete.
Type Series. Holotype only.
Comments. Retained as a valid subspecies by Hall
(1981: 858) and Pérez (1992: 1).

Family OCTODONTIDAE Waterhouse,
1839

Genus *TYMPANOCTOMYS* Yepes, 1941
Octomys barrerae Lawrence, 1941
Proc. New England Zool. Club, 18: 43,
28 January.
= *Tympanoctomys barrerae* (Lawrence,
1941). See Yepes (1942: 75).

Holotype. MCZ 39716. Skin and skull. Adult male.
Locality. Argentina: Mendoza Province, La Paz.
April 1939.

Collector. J. M. de la Barrera. Original number A31.

Condition. Skin and skull complete.

Type Series. Holotype only.

Comments. Type species of *Tympanoctomys* Yepes, 1941. *T. barrerae* was considered a valid species by Woods (1993: 789) and Nowak (1999: 1683).

Family ECHIMYIDAE Gray, 1825

Genus *BOROMYS* Miller, 1916

Boromys torrei G. M. Allen, 1917a

Bull. Mus. Comp. Zool., 61: 6, January.

Holotype. VP 9601. Palate.

Locality. Cuba: Matanzas Province, cave in Sierra de Hato Nuevo.

Collector. C. de la Torre.

Condition. Condition as described in original—"palate with root of right zygomatic arch, pm^1 and alveolar row of right side, m^1 and posterior part of alveolar row of left side."

Type Series. Paratype material consists of 8 lower jaws and 2 separate lower molars; in the MCZ.

Comments. Considered a valid species by Woods (1993: 799) and Nowak (1999: 1703) but almost certainly extinct. This specimen is stored in the Vertebrate Paleontology Department of the MCZ.

Genus *DIPLOMYS* Thomas, 1916

Loncheres labilis Bangs, 1901b

Amer. Nat., 35: 638, 22 August.

= *Diplomys labilis* (Bangs, 1901). See Thomas (1916: 296).

Holotype. B8480. Skin and skull. Adult male.

Locality. Panama: (Panama), Gulf of Panama, San Miguel Island. 26 April 1900.

Collector. W. W. Brown, Jr. Original number 103.

Condition. Skin and skull complete.

Type Series. There is a small series of paratypes in the MCZ and FMNH.

Comments. *D. labilis* was considered a valid species by Woods (1993: 791) and Nowak (1999: 1695).

Genus *PROECHIMYS* J. A. Allen, 1899

Proechimys burrus Bangs, 1901b

Amer. Nat., 35: 640, 22 August.

= *Proechimys semispinosus burrus* Bangs, 1901. See Goldman (1920: 120).

Holotype. B8458. Skin and skull. Adult male.

Locality. Panama: (Panama), Gulf of Panama, San Miguel Island. 30 April 1900.

Collector. W.W. Brown, Jr. Original number 130.

Condition. Skin and skull complete. Right dentary broken at pm_1 .

Type Series. There is a large series of paratypes in the MCZ.

Comments. *P. s. burrus* was retained as a valid subspecies by Hall (1981: 873).

Proechimys gorgonae Bangs, 1905b

Bull. Mus. Comp. Zool., 46: 89, June.

Holotype. MCZ 10828. Skin and skull. Adult male.

Locality. Colombia: (Cauca), Gorgona Island. 2 July 1904.

Collector. W. W. Brown, Jr. Original number 25.

Condition. Skin and skull complete.

Type Series. 6 paratypes; MCZ 10829–10834, all represented by skin and skull, 1 female and 5 males. MCZ 10830 and 10834 are now in the FMNH.

Comments. Treated as a separate species by Woods (1993: 796) but included in *P. cayennensis* by Nowak (1999: 1689).

Proechimys guyannensis hyleae Moojen, 1948

Univ. Kansas Publ. Mus. Nat. Hist., 1: 361, 10 December.

= *Proechimys cayennensis hyleae* Moojen, 1948. See comments.

Holotype. MCZ 30887. Skin and skull. Adult male.

Locality. Brazil: Para, Porto de Moz, Rio Tapajoz (=Tapajos), Tauari (=Tauary), 87 km south of Santarem. 19 January 1934.

Collector. A. M. Olalla. Original number 7288.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 20 paratypes (19 at MCZ and 1 at FMNH), represented by skin and skull.

Comments. Retained as a valid subspecies by Cabrera (1961: 521). The use of the specific name *cayennensis* over *guyannensis* follows Woods (1993: 795).

Family CAPROMYIDAE Smith, 1842

Genus *CAPROMYS* Desmarest, 1822

Capromys pilorides relictus G. M. Allen, 1911a

Bull. Mus. Comp. Zool., 54: 207, July.

Holotype. MCZ 10996. Skin and skull. Adult male.

Locality. Cuba: Isle of Pines (=Isla de Pinos), Nueva Gerona, Casas Mountains. 10 March 1902

Collector. W. R. Zappety.

Condition. Skin complete. Skull partial (bone missing from palatine to occipital).

Type Series. 1 paratype; MCZ 10997, skin and skull.

Comments. Retained as a valid subspecies by Hall (1981: 863).

Genus GEOCAPROMYS Chapman, 1901

Geocapromys cubanus G. M. Allen, 1917a
Bull. Mus. Comp. Zool. 61: 9, January.
= *Geocapromys columbianus* (Chapman,
1892). See G. M. Allen (1918b: 145).

Holotype. VP 9602. Part of right lower ramus. Juvenile.

Locality. Cuba: Matanzas Province, cave in Sierra de Hato Nuevo.

Collector. C. de la Torre.

Condition. Portion of ramus includes incisor and three anterior cheekteeth.

Type Series. Allen mentions in the original description, "Five palates with teeth, about 15 jaw fragments mostly with teeth, and numerous other fragments." This material is in the MCZ.

Comments. The type material of *cubanus* is stored in the Vertebrate Paleontology Department of the MCZ.

***Geocapromys ingrahami abaconis*
Lawrence, 1934**

Occas. Pap. Boston Soc. Nat. Hist., 8:
190, 7 November.

Holotype. VP 2108. Left lower ramus. Adult.

Locality. Bahamas: Great Abaco Island, Hole in the Wall, Imperial Lighthouse Caves. 1934.

Collector. F. Rainey.

Condition. Ramus intact.

Type Series. The paratype series is a collection of cranial and mandibular fragments, described in the original description and housed in the MCZ.

Comments. *G. i. abaconis* was retained as a valid subspecies by Hall (1981: 866) under the genus *Capromys*. Woods (1993: 800) employed the genus *Geocapromys*. *G. i. abaconis* is extinct. The type material of *abaconis* is stored in the Vertebrate Paleontology Department of the MCZ.

***Geocapromys ingrahami irrectus*
Lawrence, 1934**

Occas. Pap. Boston Soc. Nat. Hist., 8:
190, 7 November.

Holotype. VP 2107. Right lower ramus. Adult.

Locality. Bahamas: Crooked Island, Gordon Hill Caves, "Burial Cave No. 1." 1934.

Collector. F. Rainey.

Condition. Ramus intact.

Type Series. The paratype series is a collection of cranial and mandibular fragments, described in the original description and housed in the MCZ.

Comments. *G. i. irrectus* was retained as a valid subspecies by Hall (1981: 866) under the genus *Capromys*. Woods (1993: 800) employed the genus *Geocapromys*. *G. i. irrectus* is extinct. The type ma-

terial of *irrectus* is stored in the Vertebrate Paleontology Department of the MCZ.

Genus MESOCAPROMYS Varona, 1970

Capromys nana G. M. Allen, 1917b
Proc. New England Zool. Club, 6: 54, 28
March.

= *Mesocapromys nanus* (G. M. Allen,
1917). See Kratochvíl et al. (1978: 15).

Holotype. VP 9864. Right mandible.

Locality. Cuba: Matanzas, cave in Sierra de Hato Nuevo. March 1917.

Collector. T. Barbour.

Condition. Mandible partial—coronoid and angular processes broken off.

Type Series. A series of paratype material is stored at the MCZ.

Comments. G. M. Allen supplemented his description of *Capromys nanus* after Thomas Barbour provided him with a freshly killed specimen in 1918 (1918b: 140–145). Type species of the subgenus *Paracapromys* Kratochvíl, Rodríguez, and Barus, 1978. *M. nanus* was considered a valid species by Woods (1993: 801) and Nowak (1999: 1703). The type series is stored in the Vertebrate Paleontology Department of the MCZ.

Genus PLAGIODONTA F. Cuvier, 1836

Plagiodonta araeum Ray, 1964

Breviora, Mus. Comp. Zool., 203: 2, 10
April.

Holotype. VP 7675. Left upper cheektooth, originally described as "almost certainly the fourth (deciduous) premolar."

Locality. Dominican Republic: San Rafael Province, Hondo Valle Municipality, unnamed cave 2 km southeast of Rancho de La Guardia. April 1963.

Collector. R. Allen and C. E. Ray.

Condition. Condition of tooth as originally described—"damaged slightly along the posterolabial wall."

Type Series. Holotype only.

Comments. Considered a valid species by Woods (1993: 804) and Nowak (1999: 1708). Complete cranial and dentary material of *araeum* has been collected in Haiti and deposited in the Florida Museum of Natural History (Woods 1993: 804). This species is extinct. This specimen is stored in the Vertebrate Paleontology Department of the MCZ.

Order LAGOMORPHA Brandt, 1855

Family OCHOTONIDAE Thomas, 1897

Genus *OCHOTONA* Link, 1795*Ochotona cuppes* Bangs, 1899g

Proc. New England Zool. Club, 1: 40, 5 June.

= *Ochotona princeps cuppes* Bangs, 1899.

See A. H. Howell (1924: 27).

Holotype. B7389. Skin and skull. Adult male.

Locality. (Canada): British Columbia, Gold Range, Monishee Divide, 4,000 ft (1,220 m). 2 August 1897.

Collector. A. C. Brooks. Original number 1030.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; MCZ 7390–7392; all represented by skin and skull, all female. MCZ 7390 is now at FMNH.

Comments. *O. p. cuppes* was retained as a valid subspecies by Hall (1981: 289) and Smith and Weston (1990: 1).

Ochotona saxatilis Bangs, 1899g

Proc. New England Zool. Club, 1: 41, 5 June.

= *Ochotona princeps saxatilis* Bangs,

1899. See A. H. Howell (1924: 27).

Holotype. MCZ 2703. Skin. Adult male.

Locality. (United States): Colorado, Park County, Snowy Range, near Mount Lincoln, Montgomery. 27 July 1871.

Collector. J. A. Allen, Rocky Mountain Expedition. Original number 945.

Condition. Skin complete.

Type Series. Large paratype series; MCZ 209, 243–263, skulls; B41 and B42, each represented by skin and skull; MCZ 2673–2703, skins.

Comments. *O. p. saxatilis* was retained as a valid subspecies by Hall (1981: 291) and Smith and Weston (1990: 1).

Family LEPORIDAE Fischer de Waldheim, 1817

Genus *LEPUS* Linnaeus, 1758*Lepus (Macrotolagus) alleni palitans* Bangs, 1900a

Proc. New England Zool. Club, 1: 85, 23 February.

Holotype. B9096. Skin and skull. Adult female.

Locality. Mexico: Sinaloa, Aguacaliente (about 40 miles [64.4 km] southeast of Mazatlán). 7 August 1897.

Collector. P. O. Simons. Original number 157.

Condition. Skin and skull complete. Mandible disarticulated; left ramus chipped; two holes in right ramus.

Type Series. 1 paratype; B9097, skin, adult male.

Comments. Retained as a valid subspecies by Hall (1981: 332) and Best and Henry (1993: 1).

Lepus americanus struthopus Bangs, 1898e

Proc. Biol. Soc. Washington, 12: 81, 24 March.

Holotype. B2025. Skin and skull. Adult female.

Locality. (Canada): Nova Scotia, Digby. 4 August 1894.

Collector. O. Bangs. Original number 9.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 318).

Lepus arcticus bangsii Rhoads, 1896a

Amer. Nat., 30: 236, 6 March.

Holotype. B3752. Skin and skull. Adult female.

Locality. (Canada): Newfoundland, Codroy. 3 August 1895.

Collector. E. Doane. Original number 1.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 320).

Lepus bairdii Hayden, 1869

Amer. Nat., 3: 115, May.

= *Lepus americanus bairdii* Hayden, 1869.

See J. A. Allen (1875: 431).

Syntype. MCZ 5501. Skin and skull. Adult.

Locality. (United States): Wyoming, (Fremont County), summit of Wind River Mountains, near Fremont Peak. 4 June 1860.

Collector. F. V. Hayden. Original number 90. Formerly USNM 4264.

Condition. Skin and skull complete.

Type Series. 2 other adult syntypes; USNM 4262/38001, skin and skull, male; USNM 4263/4273, skin and skull; see Poole and Schantz (1942: 210).

Comments. No type is designated in the original description, which is based on 6 individuals collected by Hayden—3 adults and 3 juveniles, originally deposited in the USNM (Poole and Schantz 1942: 210).

***Lepus bairdi cascadensis* Nelson, 1907**

Proc. Biol. Soc. Washington, 20: 87, 11 December.

= *Lepus americanus cascadensis* Nelson, 1907. See Racey and Cowan (1936: H18).

Holotype. B1886. Skin and skull. Adult male.

Locality. Canada: British Columbia, near Hope, Roab's Ranch, 12 June 1874.

Collector. W. C. Colt. Original number 476.

Condition. Skin complete. Skull slightly damaged (supraoccipital and occipital chipped).

Type Series. Holotype only.

Comments. *L. a. cascadensis* was retained as a valid subspecies by Hall (1981: 315).

Genus SYLVILAGUS Gray, 1867***Lepus (Tapeti) incitatus* Bangs, 1901b**

Amer. Nat., 35: 633, 22 August.

= *Sylvilagus brasiliensis incitatus* (Bangs, 1901). See Hershkovitz (1950: 352).

Holotype. B5441. Skin and skull. Adult female.

Locality. Panama: (Panama), Bay of Panama, San Mignel Island, 30 April 1900.

Collector. W. W. Brown, Jr. Original number 127

Condition. Skin and skull complete.

Type Series. Holotype only.

Comments. *S. b. incitatus* was retained as a valid subspecies by Hall (1981: 296).

***Lepus paludicola* Miller and Bangs, 1894**

Proc. Biol. Soc. Washington, 9: 105, 9 June.

= *Sylvilagus palustris paludicola* (Miller and Bangs, 1894). See Nelson (1909: 269).

Holotype. B1451. Skin and skull. Adult female.

Locality. (United States): Florida, (Citrus County), Fort Island, near Crystal River, 28 January 1894.

Collector. F. L. Small. Original number 1150.

Condition. Skin and skull complete.

Type Series. 3 paratypes; B1452, skin and skull, adult male; B1453, skin and skull, adult male; B1454, skin and skull, adult female.

Comments. *S. p. paludicola* was retained as a valid subspecies by Hall (1981: 299) and Chapman and Willner (1981: 1).

***Lepus sylvaticus alacer* Bangs, 1896h**

Proc. Biol. Soc. Washington, 10: 136, 28 December.

= *Sylvilagus floridanus alacer* (Bangs, 1896). See Lyon (1904: 336).

Holotype. B5480. Skin and skull. Adult female.

Locality. (United States): Indian Territory

(=Oklahoma), (Adair County), Stilwell, 14 August 1896.

Collector. T. Surber. Original number 65.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; B1677, skin and skull, B1678, skin and skull, adult male; B5481, skin and skull, adult female.

Comments. *S. f. alacer* was retained as a valid subspecies by Hall (1981: 301) and Chapman et al. (1980: 1).

***Lepus sylvaticus transitionalis* Bangs, 1895a**

Proc. Boston Soc. Nat. Hist., 26: 405, 31 January.

= *Sylvilagus transitionalis* (Bangs, 1895). See Nelson (1909: 195).

Holotype. B2407. Skin and skull. Adult female.

Locality. (United States): Connecticut, New London County, Liberty Hill, 6 November 1894.

Collector. O. Bangs.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a series of paratypes in the MCZ.

Comments. *S. transitionalis* was considered a valid species by Hoffman (1993: 827) and Nowak (1999: 1727).

Order SCANDENTIA Wagner, 1855**Family TUPAIIDAE Gray, 1825****Genus TUPAIA Raffles, 1822*****Tana tana griswoldi* Coolidge, 1938**

Proc. New England Zool. Club, 17: 45, 6 May.

= *Tupaia tana paitana* (Lyon, 1913). See Medway (1965: 76).

Holotype. MCZ 36416. Skin, skull, and baculum. Subadult male.

Locality. (Malaysia): British North Borneo (=Sabah), Mount Kinabalu, Kenokok River, Kiau (=Kampong Kiau), 3,300 ft (1,007 m), 9 August 1937.

Collector. J. A. Griswold, Jr., Asiatic Primate Expedition. Original number 684.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Order PRIMATES Linnaeus, 1758

Family INDRIDAE Burnett, 1828

Genus *PROPTHECUS* Bennett, 1832

Propithecus perrieri Lavauden, 1931
 Compt. Rend. Acad. Sci. Paris, 193: 77, 6 July.
 = *Propithecus diadema perrieri* Lavauden, 1931. See W. C. O. Hill (1953: 568).

Holotype. MCZ 44857. Skin, skull, and postcranial skeleton. Adult male.

Locality. Malagasy Republic (Madagascar): (Toliary), Ifotaka, vicinity of Ambovombe. Probably 1928.

Collector. M. Perrier. Original number 1. Grandidier Collection.

Condition. Skin and skull complete. Postcranial skeleton partial (right humerus broken, foot bones left in skin).

Type Series. 3 paratypes; MCZ 44858, skin, skull, and postcranial skeleton, adult female; MCZ 44859, skin and skull, juvenile; MCZ 46001, skin and leg bones, adult.

Comments. *P. d. perrieri* was retained as a valid subspecies by Tattersall (1982: 103).

Family DAUBENTONIIDAE Gray, 1863

Genus *DAUBENTONIA* É. Geoffroy, 1795

Cheiromys madagascariensis laniger G. Grandidier, 1930d

Bull. Acad. Malgache, n. ser., 11: 106 (for 1928).

= *Daubentonia madagascariensis* (Gmelin, 1788). See G. M. Allen (1939: 134).

Holotype. MCZ 45947. Skull and postcranial skeleton. Adult male.

Locality. Madagascar: Forest of the East.

Collector. Received by G. Grandidier from the Académie Malgache, 1927–28.

Condition. Skull complete. Postcranial skeleton incomplete (hands and feet missing, presumably intact within mounted skin).

Type Series. Holotype only.

Comments. The mounted skin of the holotype is in the collection of the Académie Malgache (Antananarivo Museum). Grandidier named *laniger* as a new subspecies on account of its woolly pelage, but it is probably just a molting individual (Schwarz 1931: 428).

Family GALAGONIDAE Gray, 1825

Genus *GALAGOIDES* A. Smith, 1833

Galago demidovii orinus Lawrence and Washburn, 1936

Occ. Pap. Boston Soc. Nat. Hist., 8: 259, 8 January.

= *Galagoides orinus* (Lawrence and Washburn, 1936). See Honess (1996: 58).

Holotype. MCZ 22453. Skin and skull. Adult male.

Locality. Tanganyika Territory (=Tanzania): Morogoro, Uluguru Mountains, Bagilo, 5,000 ft (1,525 m). 17 September 1926.

Collector. A. Loveridge.

Condition. Skin and skull complete.

Type Series. Holotype only.

Family CEBIDAE Bonaparte, 1831

Genus *ALOUATTA* Lacépède, 1799

Alouatta palliata luctuosa Lawrence, 1933b

Bull. Mus. Comp. Zool., 75: 337, November.

= *Alouatta pigra* Lawrence, 1933. See Smith (1970: 363).

Holotype. MCZ 24059. Skin and skull. Adult male.

Locality. British Honduras (=Belize): Cayo District, Mount Cow. 12 April 1928.

Collector. O. L. Austin, Jr. Original number 723.

Condition. Skin and skull complete.

Type Series. Holotype only.

Alouatta palliata trabeata Lawrence, 1933b

Bull. Mus. Comp. Zool., 75: 328, November.

Holotype. MCZ 29545. Skin and skull. Adult male.

Locality. Panama: Herrera Province, Capina. March 1933.

Collector. T. Barbour. Original number 4.

Condition. Skin and skull complete.

Type Series. Lawrence mentions examining 19 specimens of *trabeata* and lists them by locality (1933: 330). 9 of these are in the MCZ; other than the holotype, they are MCZ 27784, 27785, 28735, 28736, 29543, 29544, 29546, and 29548. 1 paratype, MCZ 29547, has been exchanged to the Museu Paulista, São Paulo, Brazil.

Comments. Retained as a valid subspecies by Hall (1981: 263).

Genus *CEBUS* Erxleben, 1777*Cebus curtus* Bangs, 1905b

Bull. Mus. Comp. Zool., 46: 91, June.
 = *Cebus capucinus curtus* Bangs, 1905.
 See Cabrera (1917: 240).

Holotype. MCZ 10824. Skin and skull. Adult male.

Locality. Colombia: (Cauca), Gorgona Island. 2 July 1904.

Collector. W. W. Brown, Jr. Original number 27.

Condition. Skin and skull complete.

Type Series. 1 paratype; MCZ 10825, skin and skull, adult female.

Comments. *C. c. curtus* was retained as a valid subspecies by Cabrera (1958: 169) and Napier (1976: 36).

Family HYLOBATIDAE Gray, 1870

Genus *HYLOBATES* Illiger, 1811*Hylobates lar carpenteri* Groves, 1968

Proc. Biol. Soc. Washington, 81: 625, 30 December.

Holotype. MCZ 41430. Skin and skeleton. Adult male.

Locality. Thailand: Chienguai District, Mount Angka (=Doi Inthanon), 3,400 ft (1,037 m). 14 March 1937.

Collector. H. J. Coolidge, Jr., Asiatic Primate Expedition. Original numbers 21 and 185.

Condition. Skin, skull, and skeleton complete.

Type Series. Groves examined a series of 144 skins, skulls, and skeletons of this subspecies that were collected by the Harvard Asiatic Primate Expedition in 1937 from Chiengmai District, Thailand, "mostly in the Museum of Comparative Zoology, Harvard, but a few of the osteological specimens in the Anthropology Department, University of California at Berkeley." He examined also 18 specimens in the USNM and 1 in the AMNH, all represented by skin and skull.

Comments. Retained as a valid subspecies by Jenkins (1990: 15) and Geissman (1995: 474).

Family HOMINIDAE Gray, 1825

Genus *GORILLA* I. Geoffroy, 1853*Troglodytes gorilla* Savage and Wyman, 1847

Boston J. Nat. Hist., 5: 417, December.
 = *Gorilla gorilla gorilla* (Savage and Wyman, 1847). See Rothschild (1923: 176).

Lectotype. MCZ 9587. Skull and postcranial skeleton. Adult male.

Locality. Gabon: Gabon Estuary, Mpongwe country. 1847.

Collector. T. S. Savage. Original number 28 (of J. Wyman).

Condition. Postcranial skeleton partial (includes pelvis, sacrum, scapulae, humeri, radii, left ulna, femora, left tibia, and 7 vertebrae: 2 cervical, 3 dorsal, 2 lumbar). Head of right humerus and left femur bisected.

Type Series. The original description mentions "four skulls, two males and two females, one of each in a perfect condition, and all of them adult; a male and female pelvis, the long bones of the upper and lower extremities, and a few vertebrae and ribs." However, measurements and illustrations of only two of these specimens, an adult male and female, each represented by a skull and partial postcranial skeleton, are provided. These two, presumably the specimens originally described as being "in a perfect condition," are the only specimens of the original four to be noted in Wyman's personal notebook of osteology (unpublished, now in the library of the Boston Museum of Science) and the only original specimens of which there is any record at all. These two specimens were transferred from the Boston Society of Natural History to the MCZ in 1915-16. They bear MCZ numbers 9587 (male) and 9311 (female). The skull of the female was sawed in half (hemisected), probably by Wyman. The adult male specimen, MCZ 9587, possesses an intact skull. MCZ 9587 is the only intact specimen of the syntype series known to exist, and its measurements and an illustration of its skull are included in the original publication. Additionally, it is the only syntype whose measurements are included in Coolidge's revision of the genus *Gorilla* (1929: 325), although it is erroneously listed in that work as MCZ 9586. For these reasons, MCZ 9587 is hereby designated as lectotype of *Troglodytes gorilla* Savage and Wyman, 1847; this should ensure taxonomic consistency between past and future treatments of this name.

Comments. Type species of the genus *Gorilla* I. Geoffroy, 1853. The original description is occasionally attributed in error to Wyman (1847). *G. gorilla* was considered a valid species by Groves (1993: 276) and Nowak (1999: 618).

Order LIPOTYPHILA Haeckel, 1866

Family NESOPHONTIDAE Anthony, 1916

Genus *NESOPHONTES* Anthony, 1916*Nesophontes micrus* G. M. Allen, 1917a
 Bull. Mus. Comp. Zool., 61: 5, January.

Holotype. VP 9600. Right ramus.

Locality. Cuba: Matanzas Province, cave in Sierra de Hato Nuevo.

Collector. C. de la Torre.

Condition. Condition as originally described—"posterior half of the right ramus, containing a part of pm_1 , m_1 , m_2 , and the roots of m_3 ."

Type Series. Holotype only.

Comments. Considered a valid species by Hutterer (1993: 70) and Nowak (1999: 201); almost certainly extinct. This specimen is stored in the Vertebrate Paleontology Department of the MCZ.

Family SOLENODONTIDAE Gill, 1872

Genus SOLENODON Brandt, 1833

Antillogale marcanoi Patterson, 1962

Breviora, Mus. Comp. Zool., 165: 3, 22 August.

= *Solenodon marcanoi* (Patterson, 1962).

See Varona (1974: 8).

Holotype. VP 7261. Right lower ramus.

Locality. Dominican Republic: San Rafael Province (=Elias Pina), Hondo Valle Municipality, unnamed cave 2 km southeast of Rancho La Guardia. Summer 1958.

Collector. C. E. Ray and A. S. Rand.

Condition. Condition as originally described—"incomplete right ramus of mandible with P_3 - M_2 and alveoli of other teeth."

Type Series. 5 paratypes; 7262, left ramus, 7263, right humerus, 7264, left humerus, 7265, right ulna, 7266, left ramus, juvenile; all partial.

Comments. *A. marcanoi* is the type species of the genus *Antillogale* Patterson, 1962. *Antillogale* was first synonymized with *Solenodon* by Van Valen (1967: 255). Considered a valid species by Hutterer (1993: 69) and Nowak (1999: 199). *S. marcanoi* is probably extinct. This specimen is stored in the Vertebrate Paleontology Department of the MCZ.

Solenodon poeyanus Barbour, 1944

Proc. New England Zool. Club, 23: 6, March 7.

= *Solenodon cubanus poeyanus* Barbour, 1944. See Aguayo (1950: 131).

Holotype. MCZ 6597. Mounted skin and skull.

Locality. Cuba: Oriente (=Holguin), near Nipi Bay (=Nipe Bay).

Collector. Bought by A. Agassiz from H. A. Ward, 1891.

Condition. Skin complete. Skull partial (basioccipital plate and tympanic bullae missing, parietals damaged). Mandible disarticulated.

Type Series. In the original description, Barbour includes a photograph of a "living example of *Solenodon poeyanus* now in Zoological Garden, Havana, Cuba, from vicinity of Baracoa."

Comments. The number of this specimen is 6597, not 6957 as stated in the original description. *S. c.*

poeyanus was retained as a valid subspecies by Hall (1981: 22).

Family SORICIDAE Fischer von Waldheim, 1817

Genus BLARINA Gray, 1838

Blarina brevicauda aloga Bangs, 1902a

Proc. New England Zool. Club, 3: 76, 31 March.

Holotype. B9727. Skin and skull. Adult male.

Locality. (United States): Massachusetts, Dukes County, Martha's Vineyard, West Tisbury. 25 June 1899.

Collector. O. Bangs. Original number 2.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 9 paratypes, B9725, B9726, B9728–B9734, all represented by skin and skull, 3 females and 6 females.

Comments. Retained as a valid subspecies by Hall (1981: 54) and George et al. (1986: 1).

Blarina brevicauda compacta Bangs, 1902a

Proc. New England Zool. Club, 3: 77, 31 March.

Holotype. B9705. Skin and skull. Adult male.

Locality. (United States): Massachusetts, (Nantucket County), Nantucket (Island). 10 July 1899.

Collector. O. Bangs. Original number 3.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 6 paratypes; B9701–B9704, B9706, B9708; all represented by skin and skull, 4 females and 2 males.

Comments. Retained as a valid subspecies by Hall (1981: 56) and George et al. (1986: 1).

Genus CROCIDURA Wagner, 1832

Crocidura bicolor tephragaster Setzer, 1956

Proc. U.S. Nat. Mus., 106: 458, 28 November.

= *Crocidura fuscomurina* (Heuglin, 1865).

See Hutterer (1983: 223).

Holotype. MCZ 44773. Skin and skull. Adult male.

Locality. Anglo-Egyptian Sudan (=Sudan): (Eastern) Equatoria, Torit. 25 April 1950.

Collector. J. S. Owen. Original number 1158.

Condition. Skin and skull complete.

Type Series. Setzer mentions that he examined 18 specimens of *tephragaster*, 8 of which are in the MCZ.

Crociodura hildegardeae phaios Setzer, 1956

Proc. U.S. Nat. Mus., 106: 460, 28 November.

Holotype. MCZ 45855. Skin and skull. Adult female.

Locality. Anglo-Egyptian Sudan (=Sudan): Equatoria, Imatong Mts, Gilo, 6,500 ft (1,983 m). 12 June 1950.

Collector. J. S. Owen. Original number 1266.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; 1 from the MCZ; MCZ 45856, skin and skull, male.

Comments. Retained as a valid subspecies, *C. gracilipes phaios*, by Heim de Balsac and Meester (1977: 16); included in *Crociodura hildegardeae* by Hutterer (1993: 57).

Genus *CRYPTOTIS* Pomel, 1848

Cryptotis avia G. M. Allen, 1923a

Proc. New England Zool. Club, 8: 37, 12 February.

= *Cryptotis thomasi* (Merriam, 1897). See Woodman (1996: 414).

Holotype. MCZ 20091. Skin and skull. Adult.

Locality. Colombia: (probably Cundinamarca), El Verjon (see comments). October 1922.

Collector. N. Maria.

Condition. Skin complete. Skull partial (most of skull from frontals to occiput missing). Left ramus of mandible missing.

Type Series. Holotype only.

Comments. Considered a valid species by Hutterer (1993: 108) and Nowak (1999: 209) but synonymized as noted above. The locality "El Verjon" is not shown on any maps available to us but is possibly equivalent to "Paramo Cruz Verde" (Paynter 1997: 463).

Genus *MYOSOREX* Gray, 1838

Crociodura maurisca geata G. M. Allen and Loveridge, 1927

Proc. Boston Soc. Nat. Hist., 38: 417, 23 December.

= *Myosorex geata* (G. M. Allen and Loveridge, 1927). See Heim de Balsac (1967: 610).

Holotype. MCZ 22447. Skin and skull. Adult male.

Locality. Tanganyika Territory (=Tanzania): Morogoro, Uluguru Mountains, Nyingva, 7,500 ft (2,288 m). 19 October 1926.

Collector. A. Loveridge.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; MCZ 22448, skin and skull, adult female.

Comments. *M. geata* was considered a valid species by Hutterer (1993: 99) and Nowak (1999: 217).

Genus *SOREX* Linnaeus, 1758

Neosorex palustris acadicus G. M. Allen, 1915a

Proc. Biol. Soc. Washington, 28: 15, 12 February.

Name preoccupied by *Sorex acadicus* Gilpin, 1867.

Sorex palustris gloveralleni Jackson, 1926

J. Mammal., 7: 57, 15 February.

(Replacement name for *Neosorex palustris acadicus* G. M. Allen, 1915)

Holotype. B2046. Skin and skull. Adult female.

Locality. (Canada): Nova Scotia, Digby. 26 July 1894.

Collector. O. Bangs. Original number 3.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; B2053, exchanged to the USNM in 1922.

Comments. Retained as a valid subspecies by Hall (1981: 41) and Beneski and Stinson (1987: 1).

Sorex araneus ultimus G. M. Allen, 1914b

Proc. New England Zool. Club, 5: 51, 9 April.

= *Sorex tundrensis* Merriam, 1900. See Hutterer (1993: 121).

Holotype. MCZ 15000. Skin and skull. Adult male.

Locality. (Russian Federation): northeastern Siberia, Nijni Kolymk (=Nizhnekolymk), near mouth of Kolyma River. 6 November 1911.

Collector. J. Koren. Original number 136.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a series of paratypes, most of which are housed in the MCZ.

Sorex macropygmaeus koreni G. M. Allen, 1914b

Proc. New England Zool. Club, 5: 56, 9 April.

= *Sorex caecutiens koreni* G. M. Allen, 1914. See Yudin (1989: 281).

Holotype. MCZ 15085. Skin and skull. Adult female.

Locality. (Russian Federation): northeastern Siberia, Nijni Kolymk (=Nizhnekolymk), near mouth of Kolyma River. 19 October 1911.

Collector. J. Koren. Original number 50.

Type Series. 5 paratypes; MCZ 15003–15007, all represented by skin and skull; 4 males, 1 female. MCZ 15004, a male, was exchanged to the FMNH in 1931.

Condition. Skin and skull complete. Mandible disarticulated.

***Sorex macrurus* Batchelder, 1896**

Proc. Biol. Soc. Washington, 10: 133, 8 December.

Name preoccupied by *Sorex macrourus* Lehmann, 1822.

***Sorex dispar* Batchelder, 1911**

Proc. Biol. Soc. Washington, 24: 97, 15 May. (Replacement name for *Sorex macrurus* Batchelder, 1896)

Holotype. MCZ 41744. Skin and skull. Adult male.

Locality. (United States): New York, Essex County, Keene Heights, Beede's (see comments), 9 September 1895.

Collector. C. F. Batchelder. Original number 1384. *Condition.* Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; MCZ 41745, skin and skull, adult male.

Comments. *S. dispar* was considered a valid species by Hutterer (1993: 114) and Nowak (1999: 205). The type locality was redescribed by Martin (1966: 131) as "0.6 mile south and 0.5 mile east of Saint Huberts, Essex County, New York, lat. 44°09', long. 73°46'."

***Sorex personatus miscix* Bangs, 1899d**

Proc. New England Zool. Club, 1: 15, 28 February.

= *Sorex cinereus miscix* Bangs, 1899. See Jackson (1925: 56).

Holotype. B8651. Skin and skull. Adult male.

Locality. (Canada): Labrador, Black Bay, 10 October 1898.

Collector. E. Doane. Original number 1.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Bangs based his description on 39 specimens; corresponding to B7931–B7950 and B8651–B8669; all represented by skin and skull.

Comments. *S. c. miscix* was retained as a valid subspecies by Hall (1981: 29).

***Sorex sanguinidens* G. M. Allen, 1914b**

Proc. New England Zool. Club, 5: 54, 9 April.

= *Sorex daphaenodon sanguinidens* G. M. Allen, 1914. See Yudin (1989: 198).

Holotype. MCZ 15012. Skin and skull. Adult female.

Locality. (Russian Federation): northeastern Sibe-

ria, Nijni Kolymsk (=Nizhnekolymsk), near mouth Kolyma River. 11 December 1911.

Collector. J. Koren. Original number 221.

Condition. Tail separate from skin. Skull complete. Mandible disarticulated.

Type Series. There is a large series of paratypes, most of which are still in the MCZ.

***Sorex vir* G. M. Allen, 1914b**

Proc. New England Zool. Club, 5: 52, 9 April.

= *Sorex roboratus* Hollister, 1913. See Hoffman (1985: 17).

Holotype. MCZ 15068. Skin and skull. Adult female.

Locality. (Russian Federation): northeastern Siberia, Nijni Kolymsk (=Nizhnekolymsk), near mouth of Kolyma River. 19 December 1911.

Collector. J. Koren. Original number 230.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. There is a large series of paratypes, most of which are still in the MCZ.

Genus *SUNCUS* Ehrenberg, 1832

***Suncus ater* Medway, 1965**

Mammals of Borneo, J. Malay. Branch R. Asiat. Soc., 36: 38, December.

Holotype. MCZ 36574. Skin, skull, and postcranial skeleton. Adult female.

Locality. Malaysia: northern Borneo, Sabah, Mount Kinabalu, Lumu Lumu, 5,500 ft (1,678 m). 7 July 1937.

Collector. J. A. Griswold, Jr. Original number 462. *Condition.* Skin complete. Skull partial (tympanic bullae missing), and mandible disarticulated. Postcranial skeleton complete.

Type Series. Holotype only.

Comments. Considered a valid species by Hutterer (1993: 101) and Nowak (1999: 223).

***Suncus varilla minor* G. M. Allen and Loveridge, 1933**

Bull. Mus. Comp. Zool., 75: 57, February.

Holotype. MCZ 26754. Skin and skull. Adult female.

Locality. Tanganyika Territory (=Tanzania): Urungu, Kitungulu, 4,500 ft (1,373 m). 14 May 1930.

Collector. A. Loveridge.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Comments. Retained as a valid subspecies by Heim de Balsac and Meester (1977: 6).

Family TALPIDAE Fischer de Waldheim, 1817

Genus *NEUROTRICHUS* Günther, 1880

Neurotrichus gibbsi hyacinthinus Bangs, 1897d

Amer. Nat., 31: 240, 1 March.

Holotype. B1240. Skin and skull. Adult female.

Locality. U.S.A. (United States): California, Marin County, Nicasio. 10 March 1894.

Collector. C. A. Allen. Original number 694.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; B1241, skin and skull, adult male.

Comments. Retained as a valid subspecies by Hall (1981: 67) and Carraway and Verts (1991: 1).

Genus *SCALOPUS* Desmarest, 1804

Scalops anastasae Bangs, 1898b

Proc. Boston Soc. Nat. Hist., 28: 212, 15 March.

= *Scalopus aquaticus anastasae* (Bangs, 1898). See Jackson (1915: 39).

Holotype. B7192. Skin and skull. Adult male.

Locality. U.S.A. (United States): Florida, St. Johns County, Anastasia Island, Point Romo. 16 February 1897.

Collector. O. Bangs. Original number 10.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 4 paratypes; B7193–B7196; all represented by skin and skull, 2 females and 2 males.

Comments. *S. a. anastasae* was retained as a valid subspecies by Hall (1981: 72).

Scalops texanus aereus Bangs, 1896h

Proc. Biol. Soc. Washington, 10: 138, 28 December.

= *Scalopus aquaticus aereus* (Bangs, 1896). See Miller (1912: 8).

Holotype. B5475. Skin and skull. Adult female.

Locality. (United States): Indian Territory (=Oklahoma) (Adair County), Stilwell. 13 August 1896.

Collector. T. Surber. Original number 64.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Comments. *S. a. aereus* was retained as a valid subspecies by Hall (1981: 72).

Genus *SCAPANUS* Pomel, 1848

Scapanus californicus minusculus Bangs, 1899j

Proc. New England Zool. Club, 1: 70, 31 July.

= *Scapanus latimanus minusculus* Bangs, 1899. See Grinnell and Swarth (1912: 133).

Holotype. B9189. Skin and skull. Adult female.

Locality. (United States): California, El Dorado County, Fyffe. 10 June 1897.

Collector. W. W. Price and E. M. Nutting. Original number 15.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Comments. *S. l. minusculus* was retained as a valid subspecies by Hall (1981: 70).

Order CHIROPTERA Blumenbach, 1779

Family PTEROPODIDAE Gray, 1821

Genus *AETHALOPS* Thomas, 1923

Aethalops aequalis G. M. Allen, 1938b

J. Mammal., 19: 497, 14 November.

= *Aethalops alecto aequalis* G. M. Allen, 1938. See Hill (1961: 639).

Holotype. MCZ 36582. Skin, skull, and postcranial skeleton. Adult female.

Locality. (Malaysia): British North Borneo (=Sabah), Mount Kinabalu, Luma Luma, 5,500 ft (1,678 m). 12 July 1937.

Collector. J. A. Griswold, Jr., Asiatic Primate Expedition. Original number 510.

Condition. Skin, skull, and postcranial skeleton complete.

Type Series. 3 paratypes; MCZ 36583, skin, skull and skeleton, female; MCZ 36584, skin and skull, female; MCZ 36586, skin and skull, female.

Comments. *A. a. aequalis* was retained as a valid subspecies by Koopman (1994: 35).

Genus *EONYCTERIS* Dobson, 1873

Eonycteris spelaea glandifera Lawrence, 1939

In Barbour, Lawrence, and Peters, Bull. Mus. Comp. Zool., 86: 38, November.

Holotype. MCZ 35159. Skin and skull. Adult male.

Locality. Philippines: Luzon, (Nueva Ecija), Rizal, Montalban caves near Manila. 27 February 1937.

Collector. B. Lawrence. Original number 253.

Condition. Skin and skull complete.

Type Series. In the original description, Lawrence

implies the existence of several specimens in addition to the holotype; she collected 18 specimens of *glandifera* during her 1936–37 expedition to the Philippines, all of which are in the MCZ.

Comments. Retained as a valid subspecies by Maharadatunkamsi and Kitchener (1997: 59).

Genus HAPLONYCTERIS Lawrence, 1939

***Haplonycteris fischeri* Lawrence, 1939**

In Barbour, Lawrence, and Peters, Bull. Mus. Comp. Zool., 86: 33, November.

Holotype. MCZ 35258. Skin and skull. Adult male.

Locality. Philippines: Mindoro (Oriental), Mount Halcon, Bignay. 26 April 1937.

Collector. F. S. Rivera. Original number BL 502.

Condition. Skin and skull complete.

Type Series. Holotype only.

Comments. Type species of the genus *Haplonycteris* Lawrence, 1939. Considered a valid species by Koopman (1993: 142) and Nowak (1999: 292).

Genus PTEROPUS Erxleben, 1777

***Pteropus anetianus aorensis* Lawrence, 1945**

Proc. New England Zool. Club, 23: 66, 26 March.

Holotype. MCZ 42183. Skin and skull. Adult male.

Locality. (Vanuatu): New Hebrides, off southwest corner of Espiritu Santo Island, Aore Island. 8 April 1944.

Collector. O. L. Austin, Jr. Original number 5.

Condition. Skin complete. Skull partial (basioccipital missing), right ramus of mandible broken.

Type Series. 1 paratype; MCZ 42182, skin and skull, adult male.

Comments. Retained as a valid subspecies by Koopman (1994: 25) and Flannery (1995b).

***Pteropus ariel* G. M. Allen, 1908**

Bull. Mus. Comp. Zool., 52: 28, July.
= *Pteropus giganteus ariel* G. M. Allen, 1908. See Hill (1958: 5).

Holotype. MCZ 10565. Skin and skull. Adult male.

Locality. Maldive Islands: Male Atoll. 24 December 1901.

Collector. H. B. Bigelow, A. Agassiz Expedition.

Condition. Right wing of skin damaged. Skull intact, with 2 small holes in braincase.

Type Series. 1 paratype; MCZ 10566, skin and skull, juvenile female.

Comments. *P. g. ariel* was retained as a valid subspecies by Koopman (1994: 26).

***Pteropus austini* Lawrence, 1945**

Proc. New England Zool. Club, 23: 59, 26 March.

= *Pteropus woodfordi* Thomas, 1888. See Sanborn and Beecher (1947: 389).

Holotype. MCZ 42166. Skin and skull. Subadult female.

Locality. Solomon Islands: Florida Island (Nggela Group). 20 February 1944.

Collector. O. L. Austin, Jr. Original number 2.

Condition. Skin and skull complete.

Type Series. 1 paratype; MCZ 42167, skin and skull, subadult male.

Comments. Lawrence referred to the holotype as an adult in the original description, but Sanborn and Beecher (1947: 389) recognized it as a subadult.

***Pteropus rayneri monoensis* Lawrence, 1945**

Proc. New England Zool. Club., 23: 63, 26 March.

Holotype. MCZ 42191. Skin and skull. Adult male.

Locality. Solomon Islands: Treasury (Mono) Island. 11 October 1944.

Collector. O. L. Austin, Jr. Original number 27.

Condition. Skin and skull complete.

Type Series. 2 paratypes; MCZ 42192, skin and skull, adult male; MCZ 42193, skin and skull, adult male.

Comments. Retained as a valid subspecies by Koopman (1994: 24) and Flannery (1995b: 285).

Genus ROUSETTUS Gray, 1821

***Rousettus madagascariensis* G.**

Grandidier, 1930b

Bull. Acad. Malgache, n. ser., 11: 91 (for 1928).

Holotype. MCZ 45432. Alcoholic and skull. Adult male.

Locality. Malagasy Republic (Madagascar): (Antananarivo), between Tananarive (=Antananarivo) and Andovoranto, Grand forest de Est, near Beforona.

Collector. Received by G. Grandidier from the Académie Malgache, 1917.

Condition. Alcoholic, skull complete.

Type Series. Holotype only.

Comments. Considered a valid species by Koopman (1993: 153) and Nowak (1999: 261). In his review of known material of *R. madagascariensis*, Bergmans (1977: 67) commented in error that the holotype was in the Académie Malgache, Antananarivo, Madagascar.

Family EMBALLONURIDAE Gervais, 1855

Genus *PEROPTERYX* Peters, 1867

Peropteryx canina phaea G. M. Allen,
1911a

Bull. Mus. Comp. Zool., 54: 222, July.
= *Peropteryx macrotis phaea* G. M. Allen,
1911. See Sanborn (1937: 342).

Holotype. MCZ 8101. Skin and skull. Adult female.
Locality. Grenada: Point Saline(s). 29 August 1910.
Collector. G. M. Allen. Original number 15.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. There is a series of paratypes in the MCZ.
Comments. *P. n. phaea* was retained as a valid subspecies by Hall (1981: 82) and Koopman (1994: 47).

Genus *RHYNCHONYCTERIS* Peters,
1867

Rhynchiscus naso priscus G. M. Allen,
1914c

Proc. Biol. Soc. Washington, 27: 109, 10
July.
= *Rhynchonycteris naso* (Wied-Neuwied,
1820). See Sanborn (1937: 326).

Holotype. MCZ 13208. Skin and skull. Adult.
Locality. Mexico: Quintana Roo, Xcopen. 18 February 1912.
Collector. J. L. Peters. Original number 13.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. 3 paratypes; MCZ 13209, skin and skull, adult male; MCZ 14637, alcoholic, adult male; MCZ 14638, alcoholic, adult female.

Family NYCTERIDAE Van der Hoeven,
1855

Genus *NYCTERIS* G. Cuvier and É.
Geoffroy, 1795

Nycteris madagascariensis G. Grandidier,
1937

Bull. Mus. Nat. Hist. Paris, 9: 353, 25
November.

Holotype. MCZ 45433. Body in alcohol, skull extracted.
Locality. Madagascar: (Antsiranana), Diego-Suarez (=Antsiranana), Valley of the Rodo, north of Pirakana near the Ankarana, 12°5'–13°0'S, 49°5'E. June 1910.
Collector. Grandidier collection.

Condition. Alcoholic, skull complete.
Type Series. 1 paratype, MCZ 45434, in alcohol, skull extracted, female.
Comments. *N. madagascariensis* was included in *N. macrotis* by Koopman (1993: 162) but retained as a valid species by Peterson et al. (1995: 63).

Nycteris nana tristis G. M. Allen and
Lawrence, 1936

Bull. Mus. Comp. Zool., 79: 47, January.
= *Nycteris nana* (Andersen, 1912). See
Hayman and Hill (1971: 19).

Holotype. MCZ 31156. Skin and skull. Adult female.
Locality. Kenya: (W. Nyanza), Kakanega District, Kaimosi. 13 February 1934.
Collector. A. Loveridge.
Condition. Skin and skull complete. Mandible disarticulated.
Type Series. Holotype only.

Family RHINOLOPHIDAE Gray, 1825

Genus *HIPPOSIDEROS* Gray, 1831

Hipposideros curtus G. M. Allen, 1921
Rev. Zool. Africaine, 9: 194, December.

Holotype. MCZ 19305. Body in alcohol. Female.
Locality. Cameroons (=Cameroon): (Littoral), Sakbayeme. 1920.
Collector. G. Schwab.
Condition. Alcoholic. Skull extracted but not cleaned (still in alcohol).
Type Series. Holotype only.
Comments. *H. curtus* was considered a valid species by Koopman (1993: 172) and Nowak (1999: 333).

Hipposideros erigens Lawrence, 1939

In Barbour, Lawrence, and Peters, Bull.
Mus. Comp. Zool., 86: 56, November.
= *Hipposideros bicolor erigens* Lawrence,
1939. See Hill (1963: 28).

Holotype. MCZ 35197. Skin and skull. Adult male.
Locality. Philippines: Mindoro, (Oriental) Tabucala cave near Calapan, northern base of Mount Halcon. 7 March 1937.
Collector. B. Lawrence. Original number 307.
Condition. Skin complete. Skull partial (occiput missing), and mandible disarticulated.
Type Series. 3 paratypes; MCZ 35195, skin and skull, adult female; MCZ 35196, skin and skull, adult male; MCZ 35198, skin and skull, adult female.
Comments. *H. b. erigens* was retained as a valid subspecies by Koopman (1994: 61).

***Hipposideros turpis* Bangs, 1901a**

Amer. Nat., 35: 561, 31 July.

= *Hipposideros turpis turpis* Bangs, 1901.

See Hill (1963: 94).

Holotype. MCZ 10003. Skin and skull. Adult female.**Locality.** (Japan): Ryukyu Islands, southern group of Liu Kiu Islands, Ishigaki Island. 10 May 1899.**Collector.** I. Zensaku.**Condition.** Skin complete. Skull partial (occipital region missing).**Type Series.** 2 paratypes; MCZ 10002, skin and skull, adult female; MCZ 10004, skin and skull, adult male.**Comments.** *H. turpis* was considered a valid species by Koopman (1993: 175) and Nowak (1999: 334).**Genus RHINOLOPHUS Lacépède, 1799*****Rhinolophus megaphyllus ignifer* G. M. Allen, 1933**

Allen, 1933

J. Mammal., 14: 149, 15 May.

= *Rhinolophus megaphyllus megaphyllus* Gray, 1834. See Koopman (1984: 9).**Holotype.** MCZ 29078. Skin and skull. Adult male.**Locality.** Australia: Queensland, Cape York, Coen. 12 June 1932.**Collector.** P. J. Darlington, Jr., Harvard Australian Expedition. Original number 185.**Condition.** Skin and skull complete. Mandible disarticulated.**Type Series.** 1 paratype; MCZ 29079, skin and skull, adult male.***Rhinolophus philippinensis alleni***

Lawrence, 1939

In Barbour, Lawrence, and Peters, Bull. Mus. Comp. Zool., 86: 46, November.

Holotype. MCZ 35097. Skin and skull. Adult female.**Locality.** Philippines: Mindoro, (Oriental) Tabucala cave near Calapan, northern base of Mount Halcon. 7 March 1937.**Collector.** B. Lawrence. Original number 302.**Condition.** Skin and skull complete. Mandible disarticulated.**Type Series.** 2 paratypes; MCZ 35098, skin and skull, adult female; MCZ 35099, skin and skull, adult female.**Comments.** Retained as a valid subspecies by Koopman (1994: 57).**Genus TRIAENOPS Dobson, 1871*****Triaenops aurita* G. Grandidier, 1912**

Bull. Mus. Hist. Nat. Paris, 18: 8, 25

January.

Holotype. MCZ 45080. Mummy.**Locality.** Malagasy Republic (=Madagascar): (Antsiranana), Diego-Suarez (=Antsiranana). 1910.**Collector.** Dr. Mazieres.**Condition.** Mummy (dried carcass), complete.**Type Series.** Holotype only.**Comments.** Traditionally included in *Triaenops furculus*, as in G. M. Allen (1939: 82) and Koopman (1993: 175), but retained as distinct by Peterson et al. (1995: 81) pending further material from the area of the type locality. Known only from the holotype.**Family MORMOOPIDAE de Saussure, 1860****Genus PTERONOTUS Gray, 1838*****Chilonycteris parnellii pusillus* G. M. Allen, 1917c**

Proc. Biol. Soc. Washington, 30: 168, 23 October.

= *Pteronotus parnellii pusillus* (G. M. Allen, 1917). See Smith (1972: 67).**Holotype.** MCZ 16468. Skin and skull. Female.**Locality.** Dominican Republic: Santo Domingo, Arroyo Salado. 7 March 1916.**Collector.** J. L. Peters. Original number 227.**Condition.** Skin complete. Skull partial (left wall of braincase broken, left tympanic bulla missing).**Type Series.** 2 paratypes; MCZ 16599, female; MCZ 16600, female; both in alcohol.**Comments.** *P. p. pusillus* was retained as a valid subspecies by Hall (1981: 92) and Koopman (1994: 71).***Chilonycteris torrei* G. M. Allen, 1916a**

Proc. New England Zool. Club, 6: 4, 8 February.

= *Pteronotus quadridens quadridens* (Gundlach, 1840). See Silva-Taboada (1976: 7).**Holotype.** MCZ 11672. Body in alcohol, skull extracted. Adult female.**Locality.** Cuba: (Guantanamo), Baracoa, La Cueva de la Majana. 15 June 1915.**Collector.** V. J. R. Verrier. Presented to the MCZ by Carlos de la Torre.**Condition.** Alcoholic, skull complete.**Type Series.** 2 paratypes; MCZ 11670, male; MCZ 11671, female; both in alcohol.**Family PHYLLOSTOMIDAE Gray, 1825****Genus AMETRIDA Gray, 1847*****Ametrida minor* H. Allen, 1894**

Proc. Boston Soc. Nat. Hist., 26: 240, 16 May.

= *Ametrida centurio* Gray, 1847. See Peterson (1965: 5).**Holotype.** MCZ 11274. Body in alcohol, skull extracted. Adult male.

Locality. Suriname: Paramaribo. Collected sometime between 1832 and 1839.

Collector. F. W. Cragin.

Condition. Alcoholic, skull complete.

Type Series. Holotype only.

Comments. For comments on the type locality and date of acquisition, see G. M. Allen (1902a: 88). A *minor* actually represents the male specimens of *A. centurio*.

Genus *ARTIBEUS* Leach, 1821

Artibeus femurvillosus Bangs, 1899k

Proc. New England Zool. Club, 1: 73, 24 November.

= *Artibeus lituratus palmarum* J. A. Allen and Chapman, 1897. See Hershkovitz (1949: 445).

Holotype. BS314. Skin and skull. Adult male.

Locality. Colombia: (La Guajira), La Concepcion, 3,000 ft (915 m). 21 March 1899.

Collector. W. W. Brown, Jr. Original number 31.

Condition. Skin and skull complete.

Type Series. Holotype only.

Genus *EROPHYLLA* Miller, 1906

Erophylla sezekorni syops G. M. Allen, 1917c

Proc. Biol. Soc. Washington, 30: 167, 23 October.

Holotype. MCZ 13713. Body in alcohol, skull extracted. Adult male.

Locality. Jamaica: (St. James), Montego Bay. 14 March 1912.

Collector. J. A. Cushman.

Condition. Alcoholic, skull complete.

Type Series. 7 paratypes; MCZ 13709–13712, 13714–13716, all alcoholic. MCZ 13709 and 13712 were sent in exchange to the USNM.

Comments. Retained as a valid subspecies by Hall (1981: 171) and Koopman (1994: 79).

Genus *GLOSSOPHAGA* É. Geoffroy, 1818

Glossophaga longirostris Miller, 1898

Proc. Acad. Nat. Sci. Philadelphia, 1898, p. 330, 2 August.

= *Glossophaga longirostris longirostris* Miller, 1898. See Miller (1913: 422).

Holotype. BS046. Skin and skull. Adult female.

Locality. Colombia: (Magdalena), Santa Marta Mountains, near Santa Marta. 10 February 1898.

Collector. W. W. Brown, Jr. Original number 60.

Condition. Skin complete. Skull partial (left zygomatic arch missing).

Type Series. Holotype only.

Comments. *G. longirostris* was considered a valid species by Koopman (1993: 184) and Nowak (1999: 368).

Genus *LONCHOPHYLLA* Thomas, 1903

Lonchophylla hesperia G. M. Allen, 1908

Bull. Mus. Comp. Zool., 52: 35, July.

Holotype. MCZ 7011. Body in alcohol, skull extracted. Adult male.

Locality. Peru: (Contrahmirante Villar), Tumbes, Zorritos.

Collector. F. H. Bradley.

Condition. Alcoholic, skull complete.

Type Series. 2 paratypes; in the YPM; 1034 and 1035; both in alcohol.

Comments. Considered a valid species by Koopman (1993: 181) and Nowak (1999: 372). This rarely collected bat is known by only two museum specimens in addition to the type series: USNM 283177 and LSUMZ 14121 (Gardner 1976: 5).

Genus *PLATYRRHINUS* de Saussure, 1860

Vampyrops umbratus Lyon, 1902

Proc. Biol. Soc. Washington, 15: 151, 20 June.

= *Platyrrhinus umbratus* (Lyon, 1902). See Koopman (1993: 191).

Holotype. BS180. Skin and skull. Adult male.

Locality. Colombia: (LaGuajira), San Miguel. 8 June 1898.

Collector. W. W. Brown, Jr. Original number 234.

Condition. Skin and skull complete.

Type Series. 2 paratypes; BS300, skin, male; BS301, skin, male.

Comments. *P. umbratus* was considered a valid species by Koopman (1993: 191) and Nowak (1999: 389). *Platyrrhinus* has priority over the genus name *Vampyrops* (Gardner and Ferrell 1990: 501–503).

Vampyrops zarhinus H. Allen, 1891

Proc. Acad. Nat. Sci. Philadelphia, 1891, p. 400, 22 September.

= *Platyrrhinus helleri* (Peters, 1866). See Hall and Kelson (1959: 131).

Holotype. MCZ 3211. Body in alcohol, skull extracted. Adult female, pregnant.

Locality. Panama: Canal Zone, Obispo. 1872. See comments.

Collector. Hassler Expedition.

Condition. Alcoholic, skull complete.

Type Series. Holotype only.

Comments. In the original description, H. Allen reported that this specimen had been collected in Brazil by the Thayer expedition. G. M. Allen emended this apparently erroneous locality to Obispo, Panama, in accordance with the accession catalogue of the MCZ (1931: 236–237). In support of Allen's decision, Rouk and Carter (1972: 4) stated, after examining the holotype of *zarhinus*, that it is "quite like specimens of [*Platyrrhinus*] *helleri* from Mexico and Central America, and unlikely to have come from Brazil." For the use of the genus *Platyrrhinus* over *Vampyrops*, see Gardner and Ferrell (1990: 501–503).

Genus *VAMPYRODES* Thomas, 1900

Vampyrodes major G. M. Allen, 1908
Bull. Mus. Comp. Zool., 52: 38, July.
= *Vampyrodes caraccioli major* G. M. Allen, 1908. See Handley (1966: 766).

Holotype. MCZ 6756. Body in alcohol. Adult female.
Locality. Panama: San Pablo (now covered by Gatun Lake). Date unrecorded.
Collector. A. Lesley.
Condition. Alcoholic.
Type Series. Holotype only.
Comments. *V. c. major* was retained as a valid subspecies by Koopman (1994: 88).

Family MOLOSSIDAE Gervais, 1855

Genus *MOPS* Lesson, 1842

Chaerephon leucostigma G. M. Allen, 1918a
Bull. Mus. Comp. Zool., 61: 513, February.
= *Mops condylurus leucostigma* (G. M. Allen, 1918). See Koopman (1994: 141).

Holotype. MCZ 16344. Skin and skull. Adult female.
Locality. Malagasy Republic (Madagascar): (Antananarivo), Tananarive (=Antananarivo). December 1915.
Collector. F. R. Wnlsin.
Condition. Skin partial (bare spot on ventrum). Skull damaged (right and left zygomatic arch missing; supraoccipital chipped).
Type Series. 1 paratype; MCZ 16345, skin and skull, male.
Comments. Peterson et al. (1995: 168) used the name *Tadarida leucostigma*.

Mops angolensis orientis G. M. Allen and Loveridge, 1942

Bull. Mus. Comp. Zool., 89: 166, February.

= *Mops condylurus orientis* G. M. Allen and Loveridge, 1942. See Koopman (1994: 141).

Holotype. MCZ 38829. Skin and skull. Adult male.
Locality. Tanganyika Territory (=Tanzania): Mtwarra, Ruvuma River, Kitaya, 300 ft (92 m). 3 April 1939.
Collector. A. Loveridge.
Condition. Skin and skull complete.
Type Series. 9 paratypes; MCZ 38826–38828, 38830–38835, all represented by skin and skull, 4 females and 5 males.

Genus *OTOMOPS* Thomas, 1913

Otomops papuensis Lawrence, 1948
J. Mammal., 29: 413, 31 December.

Holotype. MCZ 45769. Body in alcohol, skull extracted. Adult female.
Locality. Papua New Guinea: Vailala River.
Collector. Bought from Ward's Natural Science Establishment, April 1948.
Condition. Alcoholic, skull partial (right zygomatic arch missing).
Type Series. Holotype only.
Comments. Considered a valid species by Koopman (1993: 239) and Nowak (1999: 482). According to Flannery (1995a: 461), *O. papuensis* has been collected on only two occasions and, other than the holotype, is known by only 10 specimens: 2 in the BMNH, the remainder in the biological collections of the University of Papua New Guinea.

Family VESPERTILIONIDAE Gray, 1821

Genus *EPTESICUS* Rafinesque, 1820

Eptesicus darlingtoni G. M. Allen, 1933
J. Mammal., 14: 150, 15 May.

Holotype. MCZ 29113. Skin and skull. Adult female.
Locality. Australia: Queensland, Queensland National Park, MacPherson Ranges, 3,000 ft (915 m). 10 March 1932.
Collector. P. J. Darlington, Jr., Harvard Australian Expedition. Original number 30.
Condition. Skin and skull complete.
Type Series. 1 paratype; MCZ 29120 (now Queensland Museum J 5476), skin and skull, adult female.
Comments. McKean et al. (1978: 533) and Koopman (1993: 203) included *darlingtoni* in *Eptesicus pumilus*. However, Koopman also used the name *Pipistrellus darlingtoni* (1994: 116). Hoye (1995:

537) considered *darlingtoni* to be a valid species of *Vespudelus*, to which he gave full generic rank.

Genus *HARPIOCEPHALUS* Gray, 1842

Harpiocephalus rufulus G. M. Allen, 1913
Proc. Biol. Soc. Washington, 26: 214, 20
December.
= *Harpiocephalus harpia rufulus* G. M.
Allen, 1913. See Ellerman and Morrison-
Scott (1951: 187).

Holotype. MCZ 14206. Skin and skull. Adult male.
Locality. Vietnam: Tonkin, Lao-Kai (=Lao Cai). 3
January 1912.
Collector. Kobayashi Collection. Original number
14.
Condition. Skin complete. Skull partial (parietals
broken).
Type Series. Holotype only.
Comments. *H. h. rufulus* was retained as a valid
subspecies by Koopman (1994: 133).

Genus *IDIONYCTERIS* Anthony, 1923

Corynorhinus phyllotis G. M. Allen, 1916b
Bull. Mus. Comp. Zool., 60: 352, April.
= *Idionycteris phyllotis phyllotis* (G. M.
Allen, 1916). See Tumilson (1993: 418).

Holotype. MCZ 5943. Skin and skull. Adult.
Locality. Mexico: San Luis Potosí. 24 March 1878.
Collector. E. Palmer.
Condition. Skin and skull complete.
Type Series. Holotype only.
Comments. *I. phyllotis* was considered a valid spe-
cies by Koopman (1993: 205) and Nowak (1999:
457).

Genus *LASIURUS* Gray, 1838

Atalapha brachyotis J. A. Allen, 1892
Bull. Amer. Mus. Nat. Hist., 4: 47, 25
March.
= *Lasiurus borealis brachyotis* (J. A. Allen,
1892). See Niethammer (1964: 595).

Holotype. MCZ 11143. Body in alcohol. Male.
Locality. (Ecuador), Galapagos Islands: Chatham
Island. 23 June 1891.
Collector. G. Baur.
Condition. Alcoholic. The specimen was received
without a skull.
Type Series. Holotype only.
Comments. *Lasiurus brachyotis* has often been ac-
corded specific status, as in Nowak (1999: 451). In-
cluded in *L. borealis* as a valid subspecies by Koop-
man (1994: 129).

Genus *MYOTIS* Kaup, 1829

Myotis abbotti nugax G. M. Allen and
Coolidge, 1940
Bull. Mus. Comp. Zool., 87: 137, 31
December.
= *Myotis muricola nugax* G. M. Allen and
Coolidge, 1940. See Koopman (1994:
104).

Holotype. MCZ 36076. Skin and skull. Adult male.
Locality. Malaysia: north Borneo, Sabah, Mount
Kinabalu, Bundutuan, 3,500 ft (1,068 m). 25 July
1937.
Collector. J. A. Griswold, Jr., Asiatic Primate Ex-
pedition. Original number 626.
Condition. Skin and skull complete. Mandible dis-
articulated.
Type Series. 16 paratypes, MCZ 36072–36075,
36077–36080, 36082–83, 36085–89, 36091; all rep-
resented by skin and skull, 12 females and 4 males.

Myotis albicinctus G. M. Allen, 1919b
J. Mammal., 1: 2, 28 November.
= *Myotis lucifugus carissima* Thomas,
1904. See Miller and G. M. Allen (1928:
50).

Holotype. MCZ 11747. Skin and skull. Adult male.
Locality. (United States): California, (Tulare Coun-
ty), Mount Whitney, 11,000 ft (3,355 m). 14 July
1915.
Collector. G. M. Allen. Original number 1.
Condition. Skin and skull complete. Mandible dis-
articulated.
Type Series. 1 paratype, probably at USNM.
Comments. The skull of the holotype, which had
been mislaid at the time that *albicinctus* was de-
scribed, has subsequently been found and reunited
with its skin.

Myotis sodalis Miller and G. M. Allen,
1928
Bull. U.S. Nat. Mus., 144: 130, 25 May.

Holotype. MCZ 10988. Skin and skull. Adult female.
Locality. (United States): Indiana, (Crawford
County), Wyandotte cave. 7 March 1904.
Collector. J. O. Sibert.
Condition. Skin and skull complete. Mandible dis-
articulated.
Comments. Considered a valid species by Koop-
man (1993: 215) and Nowak (1999: 419).
Type Series. Miller and Allen based their descrip-
tion on an examination of 443 specimens, described
by locality in the original description (1928: 133).
30 paratypes are in the MCZ, the others are in the
FMNH, USNM, AMNH, and BMNH.

Genus *NYCTICEIUS* Rafinesque, 1819

Nycticeius africanus G. M. Allen, 1911b
Bull. Mus. Comp. Zool., 54: 328,
December.

= *Nycticeius schlieffeni albiventer* Thomas
and Wroughton, 1908. See Hayman and
Hill (1971: 36).

Holotype. MCZ 8272. Skin and skull. Male.

Locality. British East Africa (=Kenya): Meru River,
effluent of northern Guaso Nyiro (=Ewaso Ngi-
ro). 11 August 1909.

Collector. G. M. Allen. Original number 113.

Condition. Skin and skull complete.

Type Series. Holotype only.

Genus *PIPISTRELLUS* Kaup, 1829

Eptesicus phasma G. M. Allen, 1911b
Bull. Mus. Comp. Zool., 54: 327,
December.

= *Pipistrellus rendalli phasma* (G. M. Allen,
1911). See Koopman (1994: 117).

Holotype. MCZ 8279. Skin and skull. Male.

Locality. British East Africa (=Kenya): Meru River,
effluent of northern Guaso Nyiro (=Ewaso Ngi-
ro). 6 August 1909.

Collector. G. M. Allen. Original number 94.

Condition. Skin and skull complete.

Type Series. There is a small series of paratypes in
the MCZ.

Scabrifer notius G. M. Allen, 1908

Bull. Mus. Comp. Zool., 52: 46, July.
= *Pipistrellus capensis notius* (G. M. Allen,
1908). See Koopman (1994: 117).

Holotype. MCZ 4555. Alcoholic, skull extracted.
Adult male.

Locality. South Africa: (Western Cape), Cape
Town.

Collector. Received from E. L. Layard, August
1864.

Condition. Alcoholic, skull partial (right and left
zygomatic arches missing; supraoccipital chipped).

Type Series. Holotype only.

Genus *PLECOTUS* É. Geoffroy, 1813

Plecotus sacrimontis G. M. Allen, 1908
Bull. Mus. Comp. Zool., 52: 50, July.
= *Plecotus auritus sacrimontis* G. M. Allen,
1908. See Ognev (1928: 607).

Holotype. MCZ 6932. Body in alcohol. Adult male.

Locality. Japan: (Honshu), Mount Fuji. 4 Decem-
ber 1906.

Collector. A. Owston.

Condition. Alcoholic.

Type Series. Holotype only.

Comments. *P. a. sacrimontis* was retained as a valid
subspecies by Koopman (1994: 110).

Genus *SCOTOPHILUS* Leach, 1821

Scotophilus altis G. M. Allen, 1914d
Bull. Mus. Comp. Zool., 58: 350, July.
= *Scotophilus leucogaster* (Cretzschmar,
1826). See Koopman (1993: 227).

Holotype. MCZ 14463. Skin and skull. Adult male.

Locality. Sudan: Blue Nile, north of (Er) Roseires,
Aradeiba. 22 January 1913.

Collector. G. M. Allen, Phillips Sudan Expedition.
Original number 73.

Condition. Skin and skull complete.

Type Series. 3 paratypes; MCZ 14462, skin and
skull, male, exchanged to FMNH; and 14610 and
14611, both males in alcohol.

Family THYROPTERIDAE Miller, 1907

Genus *THYROPTERA* Spix, 1823

Thyroptera tricolor albigula G. M. Allen,
1923c

Proc. New England Zool. Club, 9: 1, 10
December.

= *Thyroptera tricolor albiventer* (Tomes,
1856). See Dunn (1931: 430).

Holotype. MCZ 20143. Body in alcohol, skull extract-
ed. Adult female.

Locality. Panama: Gutierrez, 25 miles (40.2 km)
inland from Chiriquisito on trail from Chiriqui La-
goon, Bocas del Toro to Boquete, Chiriqui. August
1923.

Collector. E. R. Dunn and C. B. Duryea.

Condition. Alcoholic, skull complete.

Type Series. 3 paratypes; MCZ 20144, adult male;
MCZ 20145, juvenile; MCZ 20146, juvenile; all in
alcohol.

Order ARTIODACTYLA Owen, 1848

Family TAYASSUIDAE Palmer, 1897

Genus *PECARI* Reichenbach, 1835

Tayassu crusnigrum Bangs, 1902b
Bull. Mus. Comp. Zool., 39: 20, April.
= *Pecari tajacu crusnigrum* (Bangs, 1902).
See Hershkovitz (1951: 567).

Holotype. MCZ 10163. Skin and skull. Adult male.

Locality. Panama: Chiriqui, Boquete (=Bajo Bo-
quete), 4,000 ft (1,220 m). 13 April 1901.

Collector. W. W. Brown, Jr. Original number 290.

Condition. Skin and skull complete.

Type Series. 2 paratypes; MCZ 10162, adult female; MCZ 10164, juvenile female.

Comments. *P. t. crusnigrum* was retained as a valid subspecies by Hall (1981: 1080) under the genus *Dicotyles*.

Tayassu torvus Bangs, 1898k

Proc. Biol. Soc. Washington, 12: 164, 10 August.

= *Pecari tajacu torvus* (Bangs, 1898). See comments.

Holotype. BS038. Skin and skull. Adult male.

Locality. Colombia: Magdalena, Santa Marta. 26 January 1898.

Collector. W. W. Brown, Jr. Original number 50.

Condition. Skin and skull complete.

Type Series. Holotype only.

Comments. Retained as a valid subspecies by Cabrera (1961: 319) under the genus *Tayassu*. Use of the genus *Pecari* follows Grubb (1993: 380).

Family MONODONTIDAE Gray, 1821

Genus *DELPHINAPTERUS* Lacépède, 1804

Beluga declivis Cope, 1865

Proc. Acad. Nat. Sci. Philadelphia, 17: 278.

= *Delphinapterus leucas* (Pallas, 1776).

See Hershkovitz (1966: 111).

Holotype. MCZ 1195. Skull and postcranial skeleton.

Locality. "Arctic Seas" (probably Greenland).

Collector. E. K. Kane.

Condition. Skull partial (right mandibular ramus missing). Postcranial skeleton complete except for missing left flipper. Right flipper and tail are uncleaned, with tissue largely intact.

Type Series. Holotype only.

Comments. Hershkovitz (1966: 111) erroneously stated that the holotype of *declivis* was deposited in the Academy of Natural Sciences in Philadelphia, and the holotype of *Beluga concreta* Cope, 1865 was in the MCZ. The opposite is in fact true; Philadelphia holds the type of *B. concreta*.

Family PHOCOENIDAE Gray, 1825

Genus *NEOPHOCAENA* Palmer, 1899

Neomeris asiaorientalis Pilleri and Gihir, 1972

Invest. Cetacea, 4: 126.

= *Neophocaena phocaenoides*

asiaorientalis (Pilleri and Gihir, 1972). See van Bree (1973: 17).

Holotype. MCZ 19998 (but see comments). Skull and postcranial skeleton. Adult male.

Locality. China: Kiangsu (= Jiangsu), Kiangyin, 80 miles (129 km) northwest of Shanghai. 7 April 1922.

Collector. F. R. Wulsin.

Condition. Skin and postcranial skeleton complete.

Type Series. Holotype only.

Comments. For a discussion of the nomenclature and synonymy of this form, consult van Bree (1973). Because *Neomeris asiaorientalis* Pilleri and Gihir, 1972 is in fact a replacement name for the preoccupied name *Delphinus melas* Schlegel, 1841, the holotype of this new name is the same as that of Schlegel's name, RMNH 23079.

Family CERVIDAE Goldfuss, 1820

Genus *ODOCOILEUS* Rafinesque, 1832

Cariacus osceola Bangs, 1896b

Proc. Biol. Soc. Washington, 10: 26, 25 February.

= *Odocoileus virginianus osceola* (Bangs, 1896). See Lydekker (1915: 148).

Holotype. B2394. Skin and skull. Adult female.

Locality. (United States): Florida, Citrus County, Citronelle. 29 December 1893.

Collector. F. L. Small. Original number 1107.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 4 paratypes; B2391, adult male, B2392, adult male, B2393, adult female, B2395, juvenile male, all represented by skin and skull.

Comments. *O. v. osceola* was retained as a valid subspecies by Hall (1981: 1096) and Smith (1991: 1).

Odocoileus [sic] *virginianus louisianae* G. M. Allen, 1901

Amer. Nat., 35: 449, 28 June.

= *Odocoileus virginianus macroura* (Rafinesque, 1817). See Miller and Kellogg (1955: 804).

Holotype. B9111. Skin and skull. Adult male.

Locality. (United States): Louisiana, Morehouse Parish, Mer Rouge. 8 November 1898.

Collector. B. V. Lilly.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; B9112, B8622, B8623, all males represented by skin and skull.

Odocoileus americanus borealis Miller, 1900

Bull. New York State Mus. 8: 83, 21 November.

= *Odocoileus virginianus borealis* Miller, 1900. See Trouessart (1905: 704).

Holotype. B4999. Skin and skull. Adult male.

Locality. (United States): Maine, (Hancock County), Bucksport. 12 December 1895.

Collector: A. G. Dorr.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Comments. *O. v. borealis* was retained as a valid subspecies by Hall (1981: 1092) and Smith (1991: 1).

Odocoileus virginianus clavium Barbour
and G. M. Allen, 1922

J. Mammal., 3: 73, 9 May.

Holotype. MCZ 19120. Skull and head skin. Adult male.

Locality. (United States): Florida, (Monroe County), Big Pine Key. Winter 1920.

Collector: T. Barbour.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 2 paratypes, MCZ 18497, skin and skull, juvenile male; MCZ 18060, skin and skull, juvenile male.

Comments. Retained as a valid subspecies by Hall (1981: 1093) and Smith (1991: 1).

Genus *RANGIFER* Hamilton Smith, 1827

Rangifer arcticus caboti G. M. Allen,
1914a

Proc. New England Zool. Club, 4: 104,
24 March.

= *Rangifer tarandus caribou* (Gmelin,
1788). See Banfield (1962: 70).

Holotype. MCZ 15372. One shed antler. Adult male.

Locality. Canada: northeast coast of Labrador, about 30 miles (48.3 km) north of Nachvak. 1909.

Collector: O. Bryant.

Condition. Single antler; complete.

Type Series. Holotype only.

Rangifer terraenovae Bangs, 1896f

Preliminary Description of the
Newfoundland Caribou, Boston, p. 1, 11
November.

= *Rangifer tarandus caribou* (Gmelin,
1788). See Banfield (1962: 70).

Holotype. B3778. Skull and head skin. Adult male.

Locality. Canada: Newfoundland, Codroy. 8 September 1895

Collector: E. Doane.

Condition. Skull and head skin complete.

Type Series. Bangs remarks that he has "secured a series of this fine caribou," corresponding to B3779–B3781 and B5757–B5760.

Comments. J. A. Allen published a description of *Rangifer terraenovae* on 21 November 1896, specifying AMNH 11775, a mounted specimen of a

male adult, as the holotype (1896: 233). Bangs' description of this taxon pre-dates J. A. Allen's by 10 days and thus has priority.

Family BOVIDAE Gray, 1821

Genus *DAMALISCUS* Sclater and
Thomas, 1894

Damaliscus phillipsi Harper, 1939

Proc. Biol. Soc. Washington, 50: 90, 5
June.

= *Damaliscus pygargus phillipsi* Harper,
1939. See comments.

Holotype. MCZ 35443. Skull and skin. Adult male.

Locality. South Africa: Orange Free State. 23 July 1935.

Collector: P. Andreka. Original number 1958d.

Condition. Skin complete. Skull partial (most of palate, left maxilla, and left mandibular ramus missing).

Type Series. Paratype material consists of MCZ 35444, skin and skull of an adult female as well as the following, which Harper examined in the collection of the Academy of Natural Sciences of Philadelphia: "a mounted head, a skull, and a set of horns purchased in Kimberley, Cape Province; a mounted head and a set of horns from 'South Africa'; and two skins and skulls from the Zoological Society of Philadelphia."

Comments. Ansell (1972: 55) used the name *Damaliscus dorcas phillipsi*. For the use of *pygargus* over *dorcas*, see Rookmaaker (1991: 190).

Order CARNIVORA Bowdich, 1821

Family CANIDAE Fischer de Waldheim,
1817

Genus *CANIS* Linnaeus, 1758

Canis lupus beothucus G. M. Allen and
Barbour, 1937

J. Mammal., 18: 230, 14 May.

Holotype. MCZ 351. Skull and postcranial skeleton.
Adult, probably male.

Locality. Canada: Newfoundland. About 1865.

Collector: J. M. Nelson.

Condition. Skull and postcranial skeleton complete.

Type Series. 4 paratypes; 348, skull, adult male; 349, skull, adult, probably male; 350, skull, adult female; MCZ 28726, skin.

Comments. *C. l. beothucus* became extinct around 1911. Retained as a valid subspecies by Hall (1981: 930).

Pachycyon robustus J. A. Allen, 1885
 Mem. Mus. Comp. Zool., 10: 4,
 December.
 = *Canis familiaris* Linnaeus, 1758. See G.
 M. Allen (1920a: 498).

Holotype. MCZ 7091. Postcranial skeleton.
Locality. (United States): Virginia, Lee County, Ely
 Cave. Probably 1875.
Collector. N. S. Shaler.
Condition. Skeleton partial (right scapula, right hu-
 merus, right femur, right tibia, pelvis).
Type Series. Holotype only.
Comments. This specimen is a domesticated dog of
 Native Americans. *C. lupus familiaris* is the name
 now widely used for the domestic dog (Wozencraft
 1993: 281). *P. robustus* is the type species of *Pa-
 chyeyon* J. A. Allen, 1885. *Pachycyon* is a synonym
 of *Canis* Linnaeus, 1758, which is commonly over-
 looked, for example, in Wozencraft (1993) and Mc-
 Kenna and Bell (1997).

Genus *CERDOCYON* Hamilton Smith,
 1839

Cerdocyon thous germanus G. M. Allen,
 1923b
 Proc. Biol. Soc. Washington, 36: 55, 28
 March.

Holotype. MCZ 19850. Skin and skull. Adult.
Locality. Colombia: high savannah of Bogotá, 9,000
 ft (2,745 m).
Collector. N. Maria. Original number 25.
Condition. Skin and skull complete.
Type Series. 5 paratypes; MCZ 19849, skin and
 skull, juvenile; MCZ 20097, skin and skull, juvenile
 male; 3 specimens from the AMNH are also men-
 tioned in the description.
Comments. Retained as a valid subspecies by Berta
 (1982: 1).

Urocyon aquilus Bangs, 1898h
 Proc. Biol. Soc. Washington, 12: 93, 30
 April.
 = *Cerdocyon thous aquilus* (Bangs, 1898).
 See Langguth (1969: 178).

Holotype. BS001. Skin and skull. Adult male.
Locality. Colombia: (Magdalena), Santa Marta
 Mountains, between 2,000 and 3,000 ft (610–915
 m). 10 February 1898.
Collector. W. W. Brown, Jr. Original number 5S.
Condition. Skin and skull complete. Mandible dis-
 articulated.
Type Series. 1 paratype; BS002, skin and skull,
 adult female.
Comments. Retained as a valid subspecies by Berta
 (1982: 1).

Genus *UROCYON* Baird, 1858

Urocyon cinereoargenteus furvus G. M.
 Allen and Barbour, 1923
 Bull. Mus. Comp. Zool., 65: 266,
 February.

Holotype. MCZ 19774. Skin and skull. Probably fe-
 male.
Locality. Panama: Canal Zone, 3 miles (4.8 km)
 west of Balboa. April 1922.
Collector. T. Barbour and W. S. Brooks.
Condition. Skin and skull complete. Mandible dis-
 articulated.
Type Series. Holotype only.
Comments. Retained as a valid subspecies by Hall
 (1981: 943) and Fritzell and Haroldson (1982: 1).

Urocyon cinereoargenteus ocythous
 Bangs, 1899h

Proc. New England Zool. Club, 1: 43, 5
 June.

Holotype. B4290. Skin and skull. Adult female.
Locality. (United States): Wisconsin, Grant Coun-
 ty, Platteville. 25 January 1896.
Collector. N. E. France.
Condition. Skin and skull complete. Mandible dis-
 articulated.
Type Series. Holotype only.
Comments. Retained as a valid subspecies by Hall
 (1981: 943) and Fritzell and Haroldson (1982: 1).

Genus *VULPES* Frisch, 1775

Vulpes deletrix Bangs, 1898d
 Proc. Biol. Soc. Washington, 12: 36, 24
 March.
 = *Vulpes vulpes rubricosa* Bangs, 1898.
 See Churcher (1960: 359).

Holotype. B6967. Skin and skull. Adult female.
Locality. (Canada): Newfoundland, Bay St.
 George. 24 April 1897.
Collector. E. Doane.
Condition. Skin and skull complete.
Type Series. There is a series of paratypes in the
 MCZ.

Vulpes pennsylvanica vafra Bangs, 1897f
 Proc. Biol. Soc. Washington, 11: 53, 16
 March.

Name preoccupied by *Vulpes vafer*
 Leidy, 1869.

***Vulpes pennsylvanica rubricosa* Bangs, 1898a**

Science, n. ser., 7: 271, 25 February.

(Replacement name for *Vulpes pennsylvanica vafra* Bangs, 1897)

= *Vulpes vulpes rubricosa* Bangs, 1898.

See Churcher (1960: 359).

Holotype. B116. Skin and skull. Adult female.

Locality. (Canada): Nova Scotia, Digby. 3 November 1893.

Collector. O. Bangs.

Condition. Skin and skull complete.

Type Series. 4 paratypes; B1991, skin and skull, and B2001, skull, both adult males; B1992, skin and skull, and B2002, skull.

Comments. *V. v. rubricosa* was retained as a valid subspecies by Hall (1981: 939). *Vulpes fulvus rubricatus* Miller, 1900 (p. 128) was a misspelling and thus accidental renaming of *Vulpes pennsylvanica rubricosa* Bangs, 1898.

***Vulpes rubricosa bangsi* Merriam, 1900**

Proc. Washington Acad. Sci., 2: 667, 28 December 1898.

= *Vulpes vulpes rubricosa* Bangs, 1898.

See Churcher (1960: 359).

Holotype. B8880. Skin and skull. Juvenile female.

Locality. (Canada): Labrador, Lance (=L'Anse) au Loup. 2 October 1899.

Collector. E. Doane.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype; B8879, skin and skull, adult male.

Family URSIDAE Fischer de Waldheim, 1817**Genus *URSUS* Linnaeus, 1758*****Ursus (Euarctos) americanus sornborgeri* Bangs, 1898j**

Amer. Nat., 32: 500, July.

= *Ursus americanus americanus* Pallas, 1780. See Bangs (1909: 467).

Holotype. B7411. Skull. Adult, probably female.

Locality. Canada: Labrador; Okkak (=Okak). Summer 1897.

Collector. J. D. Sornborger, obtained "from the Eskimo."

Condition. Skull complete.

Type Series. 2 paratypes; B7412, skull, female; B7413, skull, female.

Comments. A skull from Hopedale, Labrador (MCZ 7365), has in the past been erroneously labeled as the holotype of *sornborgeri*; B7411, the

true holotype of *sornborgeri*, is now correctly labeled as such.

Family PROCYONIDAE Gray, 1825**Genus *PROCYON* Storr, 1780*****Procyon gloveralleni* Nelson and Goldman, 1930**

J. Mammal., 11: 453, 11 November.

= *Procyon lotor* (Linnaeus, 1758). See

Corbet and Hill (1991: 104).

Holotype. MCZ 18591. Skin and skull. Juvenile male.

Locality. Barbados. 1920.

Collector. F. Watts.

Condition. Skin and skull complete

Type Series. Holotype only.

Comments. Considered a valid species by Wozencraft (1993: 335) and Nowak (1999: 698) but almost certainly introduced to Barbados in the 17th century (Helgen and Wilson, in prep.). The last raccoon on Barbados was seen in 1964, and the population is probably extinct.

***Procyon lotor elucus* Bangs, 1898b**

Proc. Boston Soc. Nat. Hist., 28: 219, 15 March.

Holotype. B3502. Skin and skull. Adult male.

Locality. (United States): Florida, Brevard County, Oak Lodge, east peninsula opposite Micco. 15 February 1895.

Collector. O. Bangs.

Condition. Skin complete. Skull partial (condyle, coronoid, and angular processes of left mandibular ramus broken). Mandible disarticulated.

Type Series. There is a series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 968).

***Procyon maynardi* Bangs, 1898g**

Proc. Biol. Soc. Washington, 12: 92, 30 April.

= *Procyon lotor* (Linnaeus, 1758). See Koopman et al. (1957: 164).

Holotype. B7750. Skin and skull. Juvenile male.

Locality. Bahamas: New Providence Island, Nassau. August 1897.

Collector. H. L. Claridge.

Condition. Skin complete. Skull partial (broken from frontals to occiput). Mandible disarticulated.

Type Series. Holotype only.

Comments. Considered a valid species by Wozencraft (1993: 336) and Nowak (1999: 698) but undoubtedly a recent introduction to New Providence Island (see Olson and Pregill, 1982: 5).

Family MUSTELIDAE Fischer de Waldheim, 1817

Genus *LONTRA* Gray, 1843

Lutra degener Bangs, 1898d
Proc. Biol. Soc. Washington, 12: 35, 24 March.
=*Lontra canadensis canadensis* (Schreber, 1776). See van Zyll de Long (1972: 81).

Holotype. B6965. Skin and skull. Adult male.
Locality. Canada: Newfoundland, Bay St. George. 23 April 1897.
Collector. E. Doane.
Condition. Skin and skull complete.
Type Series. Paratype material consists of B6966, skin and skull of an adult female, mentioned by number in the original description, as well as "two extra skulls," corresponding to B3755 and B3799, and "a large series of unsexed otter skulls from Newfoundland," corresponding to MCZ 494–508.

Lutra hudsonica vaga Bangs, 1898b
Proc. Boston Soc. Nat. Hist., 28: 224, 15 March.
=*Lontra canadensis laxatina* F. Cuvier, 1823. See van Zyll de Long (1972: 81).

Holotype. B5749. Skin and skull. Adult male.
Locality. (United States): Florida, Brevard County, Micco. 17 March 1897.
Collector. F. R. Hunter.
Condition. Skin and skull complete.
Type Series. 4 paratypes; B4995, skin and skull, adult female; B4998, skin and skull, adult male; B6092, skin and skull, adult male; B6093, skin and skull, adult female.

Genus *MARTES* Pinel, 1792

Mustela atrata Bangs, 1897b
Amer. Nat., 31: 162, 1 February.
=*Martes americana atrata* (Bangs, 1897). See G. M. Allen (1942: 166)

Holotype. B5752. Skin and skull. Adult female.
Locality. Canada: Newfoundland, Bay St. George. 29 September 1896.
Collector. E. Doane. Original number 2.
Condition. Skin and skull complete.
Type Series. 12 paratypes; B5751, skin and skull, adult female; MCZ 492–93, 509–517, unsexed skulls.
Comments. *M. a. atrata* was retained as a valid subspecies by Hall (1981: 983).

Mustela brumalis Bangs, 1898j
Amer. Nat., 32: 502, July.
=*Martes americana atrata* (Bangs, 1897). See Clark et al. (1987: 1).

Holotype. B7417. Skull. Adult, probably male.
Locality. Canada: Labrador, Okkak (=Okak). Summer 1897.
Collector. J. D. Sornborger, obtained "from the Eskimo."
Condition. Skull complete.
Type Series. 2 paratypes; B7418, skull; B7419, skull; both probably male.

Genus *MUSTELA* Linnaeus, 1758

Mustela cicognanii mortigena Bangs, 1913
Bull. Mus. Comp. Zool., 54: 511, July.
=*Mustela erminea richardsonii* Bonaparte, 1838. See Hall (1951: 110).

Holotype. B3745. Skin and skull. Adult male.
Locality. Canada: Newfoundland, Bay St. George. 27 September 1895.
Collector. E. Doane. Original number 1.
Condition. Skin and skull complete.
Type Series. There is a series of paratypes in the MCZ.

Putorius frenatus neomexicanus Barber and Cockerell, 1898
Proc. Acad. Nat. Sci. Philadelphia, 1898, p. 188, May.
=*Mustela frenata neomexicana* (Barber and Cockerell, 1898). See Miller (1912: 100).

Holotype. MCZ 10475. Skin with extra tail, and skull. Adult male.
Locality. (United States): New Mexico, (Dona Ana County), Mesilla, shore of Armstrongs' Lake, 3,800 ft (1,159 m). 1 February 1898.
Collector. A. C. Tyson. Original number 58.
Condition. Skin complete, but tail poorly prepared. The tail belonging to a discarded topotype is tied to the holotype as an example. Skull complete.
Type Series. A topotype taken at the same time as the holotype was partially decomposed and discarded; the tail of this specimen is included with MCZ 10475. The original description also refers to "a specimen, without any history, in alcohol . . . in the collection of the New Mexico Agricultural College."
Comments. *M. f. neomexicana* was retained as a valid subspecies by Hall (1981: 995).

***Putorius (Arctogale) longicauda oribusus* Bangs, 1899m**

Proc. New England Zool. Club, 1: 81, 27 December.

= *Mustela frenata oribusus* (Bangs, 1899).

See Hall (1936: 105).

Holotype. B9058. Skin and skull. Adult female.

Locality. Canada: British Columbia, source of Kettle River, 7,500 ft (2,288 m). 10 September 1898.

Collector. A. C. Brooks. Original number 1368.

Condition. Skin and skull complete.

Type Series. Holotype only.

Comments. *M. f. oribusus* was retained as a valid subspecies by Hall (1981: 998).

***Putorius (Lutreola) lutensis* Bangs, 1898b**

Proc. Boston Soc. Nat. Hist., 28: 229, 15 March.

= *Mustela vison lutensis* (Bangs, 1898).

See Hollister (1913: 474).

Holotype. B7225. Skin and skull. Adult male.

Locality. (United States), Florida, St. Johns County, salt marsh opposite Matanzas Inlet. 16 February 1897.

Collector. O. Bangs. Original number 7.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. *M. v. lutensis* was retained as a valid subspecies by Hall (1981: 1003) and Larivière (1999: 1).

***Putorius (Arctogale) muricus* Bangs, 1899j**

Proc. New England Zool. Club, 1: 71, 31 July.

= *Mustela erminea muricus* (Bangs, 1899).

See Hall (1945: 77).

Holotype. B9146. Skin and skull. Juvenile male.

Locality. (United States): California, El Dorado County, Echo, 7,500 ft (2,288 m). 15 July 1897.

Collector. W. W. Price and E. M. Nutting. Original number 266.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. Holotype only.

Comments. *M. e. muricus* was retained as a valid subspecies by Hall (1981: 990) and King (1983: 1).

***Putorius noveboracensis notius* Bangs, 1899i**

Proc. New England Zool. Club, 1: 53, 9 June.

= *Mustela frenata noveboracensis*

(Emmons, 1840). See Hall (1936: 104).

Holotype. B2678. Skin and skull. Juvenile male.

Locality. (United States): North Carolina, Buncombe County, Weaverville. 10 July 1892.

Collector. J. S. Cairns. Original number 2214.

Condition. Skin complete. Skull partial (two fragments only, premaxilla-lachrymal). Mandible disarticulated.

Type Series. 2 paratypes; AMNH 1247, adult male; USNM 32239, adult male.

***Putorius occisor* Bangs, 1899i**

Proc. New England Zool. Club, 1: 54, 9 June.

= *Mustela frenata occisor* (Bangs, 1899).

See Hall (1936: 104).

Holotype. B9102. Skin and skull. Adult male.

Locality. (United States): Maine, Hancock County, Bucksport, near mouth of Penobscot River. 15 January 1899.

Collector. A. G. Dorr.

Condition. Skin complete. Skull slightly damaged (left zygomatic arch broken).

Type Series. There is a series of paratypes in the MCZ.

Comments. *M. f. occisor* was retained as a valid subspecies by Hall (1981: 997).

***Putorius rixosus* Bangs, 1896a**

Proc. Biol. Soc. Washington, 10: 21, 25 February.

= *Mustela nivalis rixosa* (Bangs, 1896).

See Reichstein (1958: 169).

Holotype. B642. Skin and skull. Adult female.

Locality. Canada: Saskatchewan, Osler. 15 July 1893.

Collector. W. C. Colt. Original number 79/181.

Condition. Skin complete. Skull slightly damaged (left zygomatic arch broken).

Type Series. Three specimens other than the holotype are mentioned by number in the original description; MCZ 5532, USNM 4231, probably female, and USNM 13904, probably male. All are unsexed skins.

Comments. *M. n. rixosa* was retained as a valid subspecies by Hall (1981: 993) and Sheffield and King (1994: 1).

***Putorius vison energumenos* Bangs, 1896c**

Proc. Boston Soc. Nat. Hist., 27: 5, March.

= *Mustela vison energumenos* (Bangs, 1896). See Miller (1912: 101).

Holotype. B3555. Skin and skull. Adult male.

Locality. Canada, British Columbia, Sumas. 23 September 1895.

Collector. A. C. Brooks. Original number 514.

Condition. Skin and skull complete.

Type Series. 1 paratype; B3556, skin and skull, juvenile male.

Comments. *M. v. energumenos* was retained as a valid subspecies by Hall (1981: 1001) and Larivière (1999: 1).

Putorius (Lutreola) vulgivagus Bangs, 1895b

Proc. Boston Soc. Nat. Hist., 26: 539, 31 July.

= *Mustela vison vulgivaga* (Bangs, 1895). See Miller (1912: 102).

Holotype. B2751. Skin and skull. Adult male.

Locality. (United States): Louisiana, Plaquemines Parish, Burbridge. 10 January 1895.

Collector. F. L. Small. Original number 1439/54.

Condition. Skin and skull complete.

Type Series. 10 paratypes; B2752–B2761, all represented by skin and skull, 9 males and 1 female.

Comments. *M. v. vulgivaga* was retained as a valid subspecies by Hall (1981: 1004) and Larivière (1999: 1).

Putorius xanthogenys mundus Bangs, 1899i

Proc. New England Zool. Club, 1: 56, 9 June.

= *Mustela frenata munda* (Bangs, 1899). See Hall (1936: 107).

Holotype. B5459. Skin and skull. Adult male.

Locality. (United States): California, Marin County, Point Reyes. 19 June 1896.

Collector. C. A. Allen. Original number 931.

Condition. Skin complete. Skull slightly damaged (left zygomatic arch broken).

Type Series. 1 paratype, B8632 (not B8631, mentioned erroneously in the original description), skin and skull, male.

Comments. *M. f. munda* was retained as a valid subspecies by Hall (1981: 995).

Family MEPHITIDAE Bonaparte, 1845

Genus *MEPHITIS* É. Geoffroy and G. Cuvier, 1795

Mephistis avia Bangs, 1898c

Proc. Biol. Soc. Washington, 12: 32, 24 March.

= *Mephitis mephitis avia* Bangs, 1898. See Hall (1936: 65).

Holotype. B5747. Skin and skull. Adult male.

Locality. (United States): Illinois, Mason County, San Jose. 10 March 1897.

Collector. H. H. and C. S. Brimley. Original number 2500.

Condition. Skin and skull complete.

Type Series. 1 paratype; B5783, skin and skull, adult male.

Comments. *M. m. avia* was retained as a valid subspecies by Hall (1981: 1019) and Wade-Smith and Verts (1982: 1).

Mephitis mephitica elongata Bangs, 1895b

Proc. Boston Soc. Nat. Hist., 26: 531, 31 July.

= *Mephitis mephitis elongata* Bangs, 1895. See A. H. Howell (1921: 39).

Holotype. B3051. Skin and skull. Adult male.

Locality. (United States): Florida, Brevard County, Micco. 5 March 1895.

Collector. O. Bangs.

Condition. Skin and skull complete.

Type Series. There is a series of paratypes in the MCZ.

Comments. Retained as a valid subspecies by Hall (1981: 1019) and Wade-Smith and Verts (1982: 1).

Mephitis mephitica scrutator Bangs, 1896i

Proc. Biol. Soc. Washington, 10: 141, 28 December.

= *Mephitis mephitis mesomelas* Lichtenstein, 1832. See Hall (1936: 66).

Holotype. B2889. Skin and skull. Adult male.

Locality. (United States): Louisiana, Acadia Parish, Cartville. 25 May 1895.

Collector. F. L. Small. Original number 1842.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 1 paratype, B2886, skin and skull, adult female.

Mephitis spissigrada Bangs, 1898c

Proc. Biol. Soc. Washington, 12: 31, 24 March.

= *Mephitis mephitis spissigrada* Bangs, 1898. See Hall (1936: 67).

Holotype. B3699. Skin and skull. Adult female.

Locality. Canada: British Columbia, Sumas. 30 September 1895.

Collector. A. C. Brooks. Original number 518.

Condition. Skin and skull complete. Mandible disarticulated.

Type Series. 3 paratypes; B3700, skin and skull, adult female, and B5548, skin and skull, adult male; B7435, skull, adult male.

Comments. *M. m. spissigrada* was retained as a valid subspecies by Hall (1981: 1022) and Wade-Smith and Verts (1982: 1).

Genus *SPILOGALE* Gray, 1865*Spilogale ambarvalis* Bangs, 1898b

Proc. Boston Soc. Nat. Hist., 28: 222, 15 March.

= *Spilogale putorius ambarvalis* Bangs, 1898. See Van Gelder (1953: 255).

Holotype. B3481. Skin and skull. Adlt male.

Locality. (United States): Florida, Brevard County, Oak Lodge, east peninsula opposite Micco. 30 January 1895.

Collector. O. Bangs. Original number 11.

Condition. Skin and skull complete.

Type Series. There is a large series of paratypes in the MCZ.

Comments. *S. p. ambarvalis* was retained as a valid subspecies by Hall (1981: 1014) and Kinlaw (1995: 1).

Family VIVERRIDAE Gray, 1821

Genus *EUPLERES* Doyere, 1835*Eupleres major* Lavauden, 1929

Compt. Rend. Acad. Sci. Paris, 189: 198, 22 July 22.

= *Eupleres goudotii major* Lavauden, 1929. See Albignac (1973: 23).

Syntypes. MCZ 45691: Skin, skull, and postcranial skeleton. Subadult female. MCZ 45962: Skin, skull, and postcranial skeleton. Subadult male.

Locality. Madagascar: (Antsiranana), foot of the Massif Tsaratanna (=Tsaratana), Upper Sombirano Valley, above village of Beangona, 1,500 m. April 1929.

Collector. Lavauden.

Condition. MCZ 45691: Skin complete, with bald spot on dorsum and tail slightly damaged. Skull and skeleton complete. Mandible disarticulated. Teeth removed from skull but present. MCZ 45962: Skin complete. Skull and skeleton complete. Mandible disarticulated. Teeth removed from skull but present.

Type Series. 2 syntypes, described above.

Comments. These are the two specimens from G. Grandidier's personal collection on which Lavauden based his original description of *Eupleres major*. Albignac (1973: 23) wrote that these type specimens were "introuvable [nowhere to be found]."

Family HERPESTIDAE Bonaparte, 1845

Genus *GALIDICTIS* I. Geoffroy, 1839*Galidictis grandidiensis* [sic] Wozencraft, 1986

J. Mammal. 67: 561, 8 August.

= *Galidictis grandidieri* Wozencraft, 1986. See Wozencraft (1987: 198).

Holotype. MCZ 45983. Skin, skull, and postcranial skeleton. Adult.

Locality. Madagascar (no further data available). The locality of the paratype, stored in the AMNH, is "Madagascar, Lac Tsimanampetsotsa, 24°08' S, 43°46' E."

Collector. No collection data available. The holotype is part of the collection of G. Grandidier.

Condition. Skin prepared flat; incomplete (ventrum missing). Skull complete.

Type Series. 1 paratype; AMNH 100478, skin and skull, adult male.

Comments. *G. grandidieri* was considered a valid species by Wozencraft (1993: 300) and Nowak (1999: 769).

Family FELIDAE Fischer de Waldheim, 1817

Genus *LEPTAILURUS* Severtzov, 1858*Felis capensis phillipsi* G. M. Allen, 1914d

Bull. Mus. Comp. Zool., 58: 337, July.

= *Leptailurus serval phillipsi* (G. M. Allen, 1914). See comments.

Holotype. MCZ 14908. Skin and skeleton. Adult male.

Locality. Sudan: Blue Nile, El Garef. 10 January 1913.

Collector. J. C. Phillips.

Condition. Skin and skull complete.

Type Series. Holotype only.

Comments. G. M. Allen (1939: 241) used the name *Felis serval phillipsi*. The use of the genus *Leptailurus* follows Wozencraft (1993: 292). *L. s. phillipsi* was retained as a valid subspecies by Smithers (1975: 7).

Genus *LYNX* Kerr, 1792*Lynx (Cervaria) fasciatus oculus* Bangs, 1899e

Proc. New England Zool. Club, 1: 23, 31 March.

= *Lynx rufus californicus* Mearns, 1897. See Grinnell and Dixon (1924: 346).

Holotype. BS633. Skin and skull. Adult male.

Locality. (United States): California, Marin County, Nicasio. 11 December 1898.

Collector. C. A. Allen. Original number 981.

Condition. Skin and skull complete.

Type Series. 1 paratype; B4789, skin and skull, adult male.

Lynx gigas Bangs, 1897e

Proc. Biol. Soc. Washington, 11: 50, 16 March.

= *Lynx rufus gigas* Bangs, 1897. See Peterson and Downing (1952: 11).

Holotype. B4951. Skin and skull. Adult male.

Locality. Canada: Nova Scotia, 15 miles (24.1 km) back of Bear River. 11 December 1895.

Collector. D. R. Ritchie.
Condition. Skin and skull complete.
Type Series. Holotype only.
Comments. *L. r. gigas* was retained as a valid subspecies by Hall (1981: 1054).

***Lynx subsolanus* Bangs, 1897e**
 Proc. Biol. Soc. Washington, 11: 49, 16 March.
 = *Lynx canadensis subsolanus* Bangs, 1897. See Elliot (1901: 296).

Holotype. B1190. Skin and skull. Adult male.
Locality. Canada: Newfoundland, Codroy. 13 June 1894.
Collector. E. Doane.
Condition. Skin and skull complete.
Type Series. 2 paratypes; B5754, skin and skull, juvenile female; B379S, skull, adult male.
Comments. *L. c. subsolanus* was retained as a valid subspecies by Hall (1981: 1051).

Genus *PUMA* Jardine, 1834

***Felis bangsi* Merriam, 1901**
 Proc. Washington Acad. Sci., 3: 595, 11 December.
 = *Puma concolor bangsi* (Merriam, 1901). See comments.

Holotype. B8413. Skin and skull. Adult male.
Locality. Colombia: (La Guajira), Dibulla. 8 October 1899.
Collector. W. W. Brown, Jr.
Condition. Skin and skull complete.
Type Series. 3 paratypes; B8147, skin and skull, adult female, and "two skulls from Peru, in the American Museum of Natural History."
Comments. Nelson and Goldman (1929: 347) used the name *Felis concolor bangsi*. The use of the genus *Puma* follows Wozencraft (1993: 296). Retained as a valid subspecies by Currier (1983: 1).

***Felis bangsi costaricensis* Merriam, 1901**
 Proc. Washington Acad. Sci., 3: 596, 11 December.
 = *Puma concolor costaricensis* (Merriam, 1901). See comments.

Holotype. MCZ 10118. Skin and skull. Adult female.
Locality. Panama: Chiriqui, Boquete (=Bajo Boquete), 4,000 ft (1,220 m). 22 April 1901.
Collector. W. W. Brown, Jr. Original number 337.
Condition. Skin and skull complete.
Type Series. There is a series of paratypes in the MCZ.
Comments. Nelson and Goldman (1929: 347) used the name *Felis concolor costaricensis*. The use of the genus *Puma* follows Wozencraft (1993: 296). Retained as a valid subspecies by Currier (1983: 1).

***Felis coryi* Bangs, 1899b**
 Proc. Biol. Soc. Washington, 13: 15, 31 January.
 = *Puma concolor coryi* (Bangs, 1899). See comments.

Holotype. B7742. Skin and skull. Adult male.
Locality. (United States): Florida, Brevard County, "wilderness back of Sebastian". 1 January 1898.
Collector. F. R. Hunter.
Condition. Skin and skull complete.
Type Series. 5 paratypes; B5489, adult female, B5650, adult female, B6992, adult male, B7743, adult female, B7744, juvenile female; all represented by skin and skull.
Comments. Nelson and Goldman (1929: 347) used the name *Felis concolor coryi*; the use of the genus *Puma* follows Wozencraft (1993: 296). *Felis coryi* Bangs, 1899 is a replacement name for *Felis concolor floridana* Cory, 1896 (1896: 109). Retained as a valid subspecies by Currier (1983: 1).

***Felis improcera* Phillips, 1912**
 Proc. Biol. Soc. Washington, 25: 85, 4 May.
 = *Puma concolor improcera* (Phillips, 1912). See comments.

Holotype. MCZ 12704. Skin and skull. Adult male.
Locality. (Mexico): Lower (=Baja) California, Calmalli. 3 September 1911.
Collector. E. W. Funcke. Original number 10.
Condition. Skin and skull complete.
Type Series. Holotype only.
Comments. Nelson and Goldman (1929: 347) used the name *Felis concolor improcera*. The use of the genus *Puma* follows Wozencraft (1993: 296). Retained as a valid subspecies by Currier (1983: 1).

Order CIMOLESTA McKenna, 1975

Family MANIDAE Gray, 1873

Genus *PHATAGINUS* Rafinesque, 1821

***Phataginus tricuspis mabirae* G. M. Allen and Loveridge, 1942**
 Bull. Mus. Comp. Zool., 89: 178, February.

Holotype. MCZ 39417. Skin, skull, and postcranial skeleton. Adult male.
Locality. Uganda: (Buganda), Chagve, Mabira Forest, Mubango. 12 November 1938.
Collector. A. Loveridge.
Condition. Skin and skull complete. Postcranial skeleton partial (includes atlas, right tibia, and right fibula).
Type Series. Holotype only.

Comments. Retained as a valid subspecies by Meester (1972: 2).

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